ORDER NO. BSD0207M006
D06

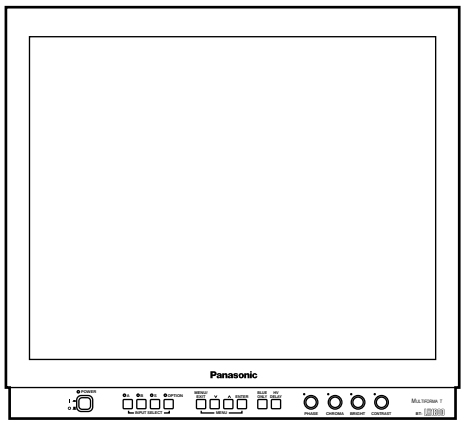
Service Manual

Sec. 1 *Service Information*
Sec. 2 *Disassembly Procedures*
Sec. 3 *Electrical Adjustments*
Sec. 4 *Block Diagrams*
Sec. 5 *Schematic Diagrams*
Sec. 6 *Circuit Board Diagrams*
Sec. 7 *Exploded Views & Replacement Parts Lists*

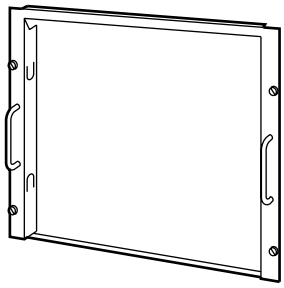
Liquid Crystal Video Monitor

BT-LH1800P/E
BT-LH1500P/E

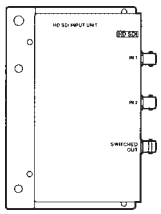
Component/RGB input unit
BT-YA100P
SDI input unit
BT-YA200P
HD SDI input unit
BT-YA300P
HD SDI input unit
BT-YA320P
Rack-mount adapter
BT-MA1800P/MA1500P



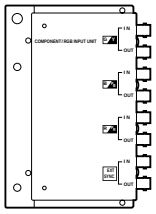
BT-LH1800P/LH1500P



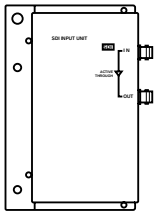
BT-MA1800P



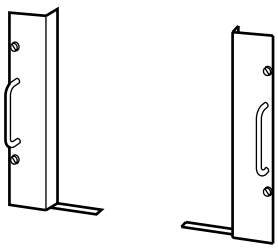
BT-YA320P



BT-YA100P



BT-YA200P/YA300P



BT-MA1500P

Panasonic

© 2002 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

■ General

Power supply:	100 V – 240 V AC, 50 – 60 Hz
Power conumption:	0.95 A – 0.40 A (BT-LH1800)
	0.66 A – 0.31 A (BT-LH1500)

▭ is the safety information.

Dimensions:	16-1/4 (W) × 14-15/16 (H) × 3-7/16 (D) inches (412 × 379 × 86 mm) (BT-LH1800) 13-15/16 (W) × 12-3/16 (H) × 3-7/16 (D) inches (353 × 309 × 86 mm) (BT-LH1500) *Depth with option installed is 4-3/8 inches (110mm) for both models.
Weight:	18.26 lbs (8.3kg) (main body only, BT-LH1800) 13.86 lbs (6.3kg) (main body only, BT-LH1500)
Operating temp.:	+41°F to +95°F (+5°C to +35°C)
Storage temp.:	+14°F to +104°F (−10°C to +40°C)
Operating humidity:	20%–80% (No condensation)
Storage humidity:	10%–90% (No condensation)

■ Panel

Size:	18 type (BT-LH1800) 15 type (BT-LH1500)
Aspect ratio:	5:4 (BT-LH1800) 4:3 (BT-LH1500)
Pixels:	1280 × 1024 (BT-LH1800, SXGA) 1024 ×768 (BT-LH1500, XGA)
Color display:	Approx. 1,6770,000 colors
View angle:	170° up/down, 170° right/left

■ Input/output connector

Standard video input

Composite:	2 systsm, BNC × 2 (One is through-out.)
S-VIDEO:	1 system, S-video connector × 2 (One is through-out.)
Signal format:	480/59.94I (NTSC) 576/50I (PAL)
Option input:	Analog component, SDI, HD-SDI One from input unit can be fitted.

■ Parallel remote input

8-input (Dsub 9-pin)

MARKER ON/OFF:	Marker ON/OFF
MARKER BACK:	Masking of Marker background
Input Select:	Selection of video input system
4:3/16:9 display:	SD ASPECT, HD ZOOM
BACKLIGHT OFF:	Backlight brightness minimum

*Pin assignment is selected by menu.

■ Standard accessories

Power cord (1)
Power cord (2) (PAL)
VESA fitting (attached to main body) (1)
Instruction manual (1)

• Option 1
SDI input unit [BT-YA200P]

SDI input/output:	Input; BNC × 1 Buffer output; BNC × 1
Signal format:	480/59.94I, 576/50I (Component Serial Digital)

• Option 2
HD SDI input unit [BT-YA300P]

HD-SDI input/output:	Input; BNC × 1	
	Buffer output; BNC × 1	
Signal format:	1080/60I	1035/60I
	1080/59.94I	1035/59.94I
	1080/50I	720/60P
	1080/24psF	720/59.94P
	1080/23.98psF	

• Option 3
Component/RGB input unit [BT-YA100P]

Analog RGB+EXT-Sync*/YPbPr Input/output:		
	Input; BNC × 4	
	Through output; BNC × 4	
	(75 Ω auto termination)	
Signal format:	**RGB**	
	1080/60I	720/60P
	1080/59.94I	720/59.94P
	1080/50I	576/50I
	1035/60I	480/59.94P
	1035/59.94I	480/59.94I
	YPbPr	
	1080/60I	1035/60I
	1080/59.94I	1035/59.94I
	1080/50I	720/60P
	1080/24psF	720/59.94P
	1080/23.98psF	575/50I
		480/59.94P
		480/59.94I

*EXT-Sync is effective only for RGB.

• Option 4
HD SDI input unit [BT-YA320P]

Type:	HD SDI input
Input/output:	HD SDI 2 systems, BNC×3 *Output (OUT) is obtained by switching the Input (IN).
Compatible format:	1080/60I, 1080/59.94I, 1080/50I, 1080/24psF, 1080/23.98psF 1035/60I, 1035/59.94I 720/60P, 720/59.94P
Dimensions:	6-5/8(W)×1(H)×4-5/16(D) inches 168×25×109 mm
Weight:	0.781 lbs (355 g)
Standard accessory:	Circuit board (1)

• Option 5
Rack-mount adapter [BT-MA1800P]
Rack-mount adapter [BT-MA1500P]

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been over-heated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. The resistance value must be more than 5MΩ.

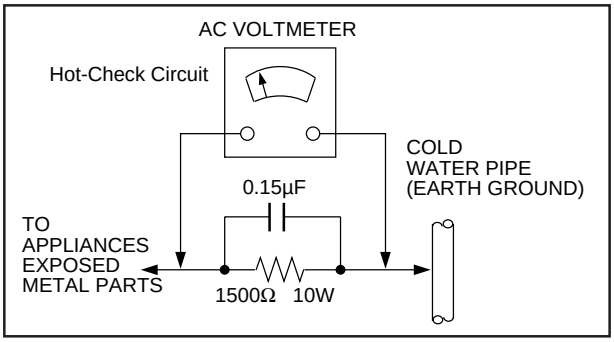


Figure1

LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.
   Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ , 10W resistor, in parallel with a 0.15μ F capacitor, between each exposed metallic part on the set an a good earth ground such as a water pipe, as shown in Figure1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverses the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.15 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 0.1 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ABOUT LEAD FREE SOLDER (PbF)

Distinction of Pbf PCB :

PCBs (manufactured) using lead free solder will have a Pbf stamp on the PCB.

Caution :

1. Pb free solder has a high melting point than standerd solder; Typically the melting point is 50-70˚F (30-40˚C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 700±20˚F (370±10˚C).
2. Pb free solder will tend to splash when heated too high (about 1100˚F/600˚C)

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ED) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.
   Alternatively, obtain and wear a commercially available discharging wrist trap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as “anti-static” can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it.
   (most replacement ES devices are package with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpacked replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

X-RADIATION

WARNING

1. The potential source of X-radiation in EVF sets is the High Voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that jig is capable of handling 10kV without causing x-radiation.

Note : It is important to use an accurate periodically calibrated high voltage meter.

3. Measure the High Voltage. The meter (electric type) reading should indicate 2.5kV, ± 0.15kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure. To prevent an x-radiation possibility, it is essential to use the specified picture tube.

Panasonic

HCD0207NYAK85

SECTION 3

ELECTRICAL ADJUSTMENTS

CONTENTS

1. ADJUSTMENT PREPARATIONS EAD-1

1-1. Adjustment preparations EAD-1

2. DC-DC SUB EAD-1

2-1. Power voltage adjustment 1 (1.2V) EAD-1

2-2. Power voltage adjustment 2 (-2.0V). EAD-1

3. MAIN EAD-1

3–1. Backlight Voltage Adjustment EAD-1

4. SUB EAD-1

4–1. PAL phase Adjustment EAD-1

5. Adjust LCD gamma EAD-2

5–1. Connection and rectifying the zero on an LCD color analyzer EAD-2

5–2. Measuring gamma EAD-3

6. ADC level adjustment EAD-5

6-1. Preparations EAD-5

6-2. ADC level adjustment 1 ..... EAD-5

1.ADJUSTMENT PREPARATIONS

1-1. Adjustment preparations

Make preparations before adjusting the electricity.

1. Switch the power off.
2. Set the switches on the sub board as follows.

SW36001		SW1	
SW1	OFF	SW1	ON
SW2	OFF	SW2	ON
SW3	ON	SW3	OFF
SW4	OFF	SW4	ON
SW5	OFF	SW5	OFF
SW6	OFF	SW6	ON
SW7	OFF	SW7	OFF
SW8	OFF	SW8	OFF

3. Equip with a BT-YA100P (component/RGB input unit) to suit the the adjustment item.

2.DC-DC SUB

2-1. Power voltage adjustment 1 (1.2V)

BOARD	DC-DC SUB board
TP	TP1702 [-1.2V]
ADJ.	VR1701 [-2VVR]
INPUT	–
MODE	–
M.EQ	DVM
SPEC.	TP1702: +1.3V ± 0.02V

1. Switch the power on.
2. Connect the DVM to TP1702 [+1.2V] on the DC-DC SUB board, then adjust VR1701 [+1.2VVR] so the voltage reads +1.3V±0.02V.

2-2. Power voltage adjustment 2 (-2.0V)

BOARD	DC-DC SUB board
TP	TP1701 [-2V]
ADJ.	VR1702 [-2VVR]
INPUT	–
MODE	–
M.EQ	DVM
SPEC.	TP1701: -2.05V ± 0.02V

1. Switch the power on.
2. Connect the DVM to TP1701 [-2V] on the DC-DC SUB board, then adjust VR1702 [-2VVR] so the voltage reads -2.05V ± 0.02V.

3.MAIN

3-1. Backlight Voltage Adjustment

BOARD	MAIN board
TP	TP201
ADJ.	VR201
INPUT	–
MODE	–
M.EQ	DVM
SPEC.	TP201: +1.0V ± 0.02V

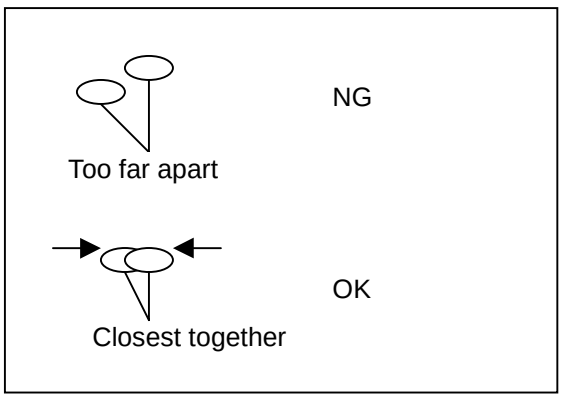
1. Switch the power on.
2. Connect the DVM to TP201 and adjust VR201 so the voltage reads 1.0V ± 0.02V.

4.SUB

4-1. PAL phase Adjustment

BOARD	SUB board
TP	TP3002,TP3003
ADJ.	C32001,VR32009
INPUT	PAL color bar
MODE	LINE_A and S-VIDEO
M.EQ	Oscilloscope
SPEC.	Minimum intersection of vectors

1. Switch the power on.
2. Connect the Oscilloscope to TP3002 and TP3003 on the sub board.
3. Set the Oscilloscope to the X-Y axes display mode.
4. Set the input selector to S-VIDEO and confirm the wave pattern.
5. Alternately adjust VC32001 and VR32009 so the intersection of the wave patterns on the oscilloscope becomes minimun. (Make sure the horizontal stripes on the monitor disappear.)
6. Slect LINE_A with the input selector and confirm that the vector intersections are not separated.

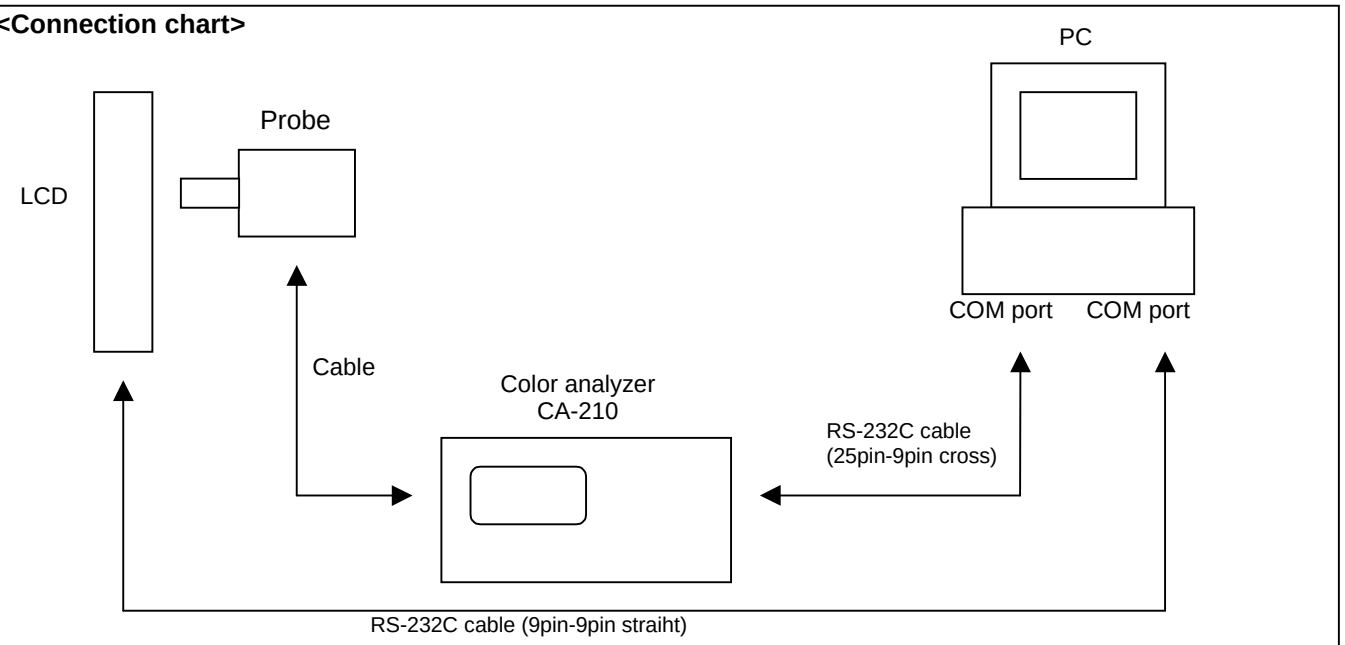


5.Adjust LCD gamma

5-1. Connection and rectifying the zero on an LCD color analyzer

M.EQ	Color analyzer CA-210 (Minolta) and computer (with 2 COM ports)
TOOLS.	RS-232C cable (9-pin 9-pin straight), RS-232C cable (25-pin 9-pin cros), VFK1792 (gamma correction software)

<Connection chart>



1. Follow the above chart to connect the measuring equipment with the cable.
2. Measure gamma in a darkend room.
3. Measure after 20 minutes of aging after turning the power on.
4. Boot up the unit in the service mode. (Switch the power on while pressing [A], [S] and [OPTION]. Then, within 5 seconds, press [MENU/EXIT] to show enter the service mode.)
5. From the service menu (confirm that SERVICE 1 appears at the top of the menu) change the REMOTE item to [RS-232C]. Now turn the power off then on again.
6. Switch on the power of the LCD color analyzer. Leave for over 5 minutes until the 0 point is calibrated (see step 7).
7. Calibrate the LCD color analyzer's 0 point as follows:
   1) Set the probe's sighting ring to "0-CAL".
   2) Press the [0-CAL] key on the front of the color analyzer.
      Confirm that the display changes as follows:

A. Power switch on display

```
DARKEN PROBE
PUSH 0-CAL KEY
```

B. Calibrating 0

```
ZERO CALIBRATION
```

C. 0 calibration complete

```
CH00 NTSC Ad P1
E1[                ]
```

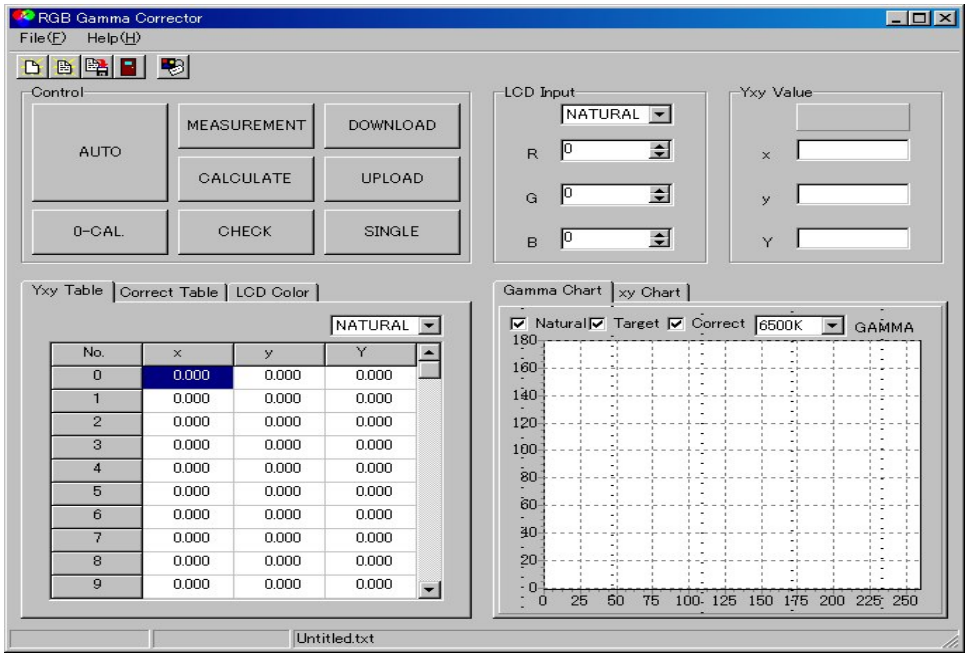
3) When 0 calibration is complete, return the probe's sighting ring to [MEAS].

* "NO SYNC SIGNAL" appears if the synchronization mode is not set to NTSC. Set the mode to NTSC.

5-2. Adjusting gamma

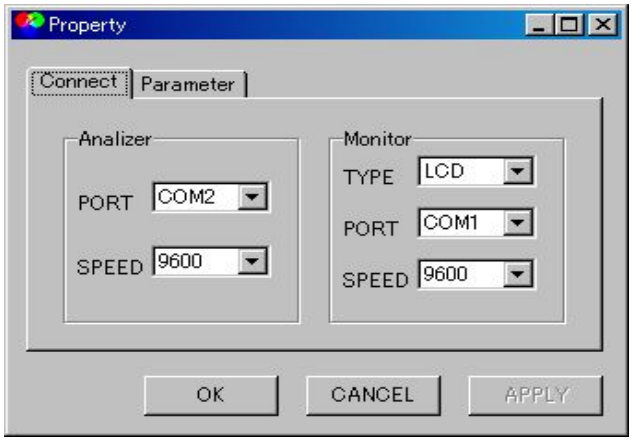
M.EQ	Color analyzer CA-210 (Minolta) , PC (with 2 COM ports)
TOOLS	RS-232C cable (9-pin 9-pin straight), RS-232C cable (25-pin 9-pin cross) VFK1792(gamma correction software)

1. Boot up the computer after completing "5-1. Connection and rectifying the zero point on an LCD color analyzer".
2. Start up "Corrector.exe",the gamma correction software. (Double-click on the "VSI1792" program file you have copied to a directory.)
3. An RGB Gamma Corrector, such is as shown below, appears when you start the program.

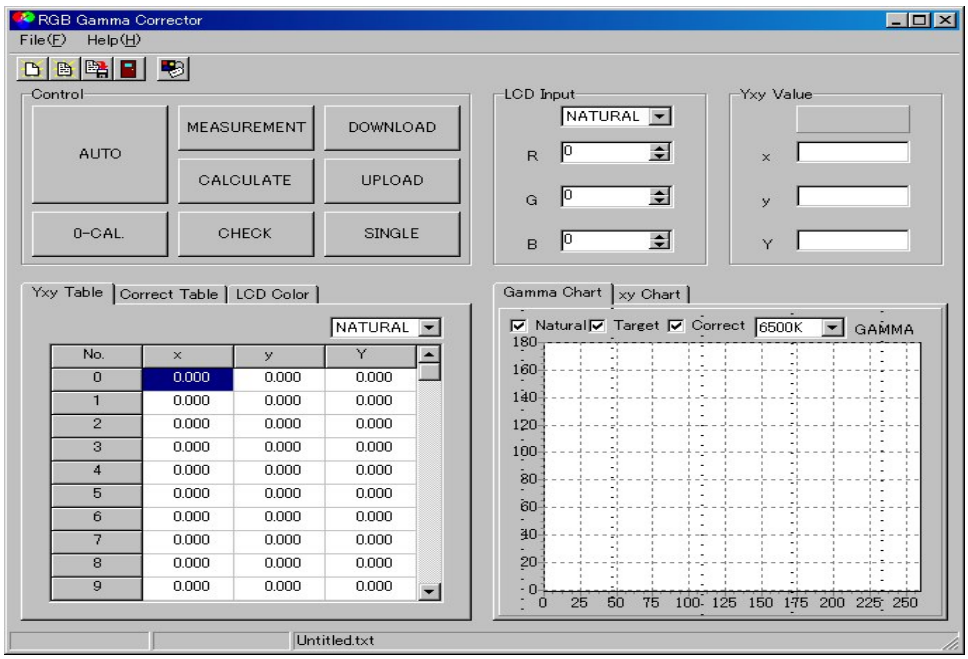


NOTE: If the message "Communication ERROR" appears, cheak the service menu's REMOTE setting and the connections.

4. Select "property" from the RGB Gamma Corrector's File menu.



5. Make the following settings in “property”.
   ◯ Analyzer
   PORT : Select the RS232C port to whidh you have connected the LCD Color analyzer
   SPEED : 9600
   ◯ Monitor
   TYPE : LCD
   PORT : Slect the RS232C port to which you have connected the LCD monitor.
   SPEED : 9600
6. Click “OK” when you have finished the settings to return to RGB Gamma Corrector.



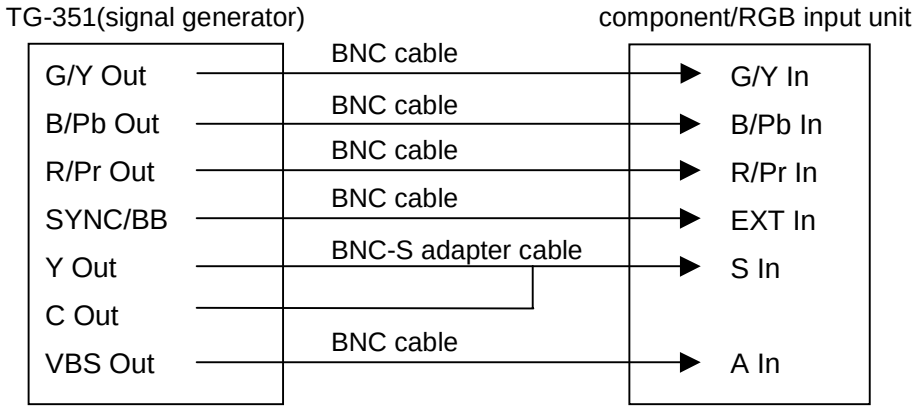
7. Click the “AUTO button to start the gamma analysis.
   Confirm that the LCD monitor first changes from red to blue to green, and then gradually fades from black to white.Confirm also that the RGB values under LCD Input in RGB Gamma Corrector change (from 0 to 255).
   Gamma analysis, gamma correction table calculation, and writing of the gamma correction data are performed automatically.
8. “Complete” appears if the process ends normally.
9. Give the data a file name to save it.
10. Quit the gamma correction software and switch off the LCD’s power.

6. ADC level adjustment

6-1. Preparations

M.EQ	Digital test signal generator TG351A (Shibasoku), BT-YA100P (component/RGB input unit)
TOOLS	4 BNC cables, 1 S-VIDEO

<Connection diagram>



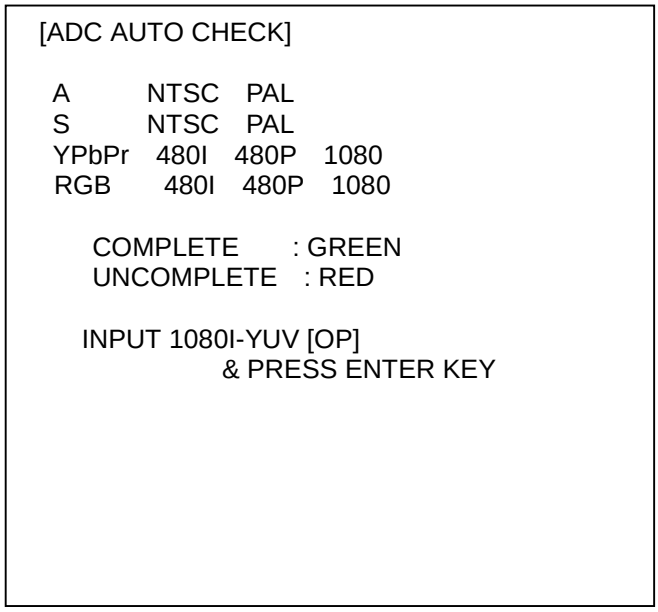
NOTE: Use cables less than 3 meters.

1. Follow the diagram to connect the signal generator and BT-YA100P (component/RGB input unit) with the BNC cables and BNC-S adapter cable.
2. Switch on the signal generator and LCD. Allow the LCD to age for 10 minutes after switching it on before making adjustments.
1. Reinitialize the LCD. While simultaneously pressing [A] + [MENU/EXIT] + [∧], switch on the unit's power.

6-2. ADC level adjustment 1

M.EQ	Digital test signal generator TG351A (Shibasoku), BT-YA100P (component/RGB input unit)
TOOLS	4 BNC cables, 1 S-VIDEO cable

1. Open the service menu. (While simultaneously pressing [A] + [S] + [OPTION], switch on the unit's power. Within 5 seconds of switching the power on, press [MENU/EXIT].)
2. Select "ADC AUTO CHECK" and press [ENTER] to go to the item's submenu.



3. Follow the instructions at the button of the screen to input the signals shown in this table.

Order	LCD display	Signal input	Input format
1	INPUT1080I-YUV [OP]	1080/60I	YPbPr
2	INPUT1080I-RGB [OP]	1080I/60I	RGB
3	INPUT480P-YUV [OP]	480/60P	YPbPr
4	INPUT480P-RGB [OP]	480/60P	RGB
5	INPUT480I-NTSC [S]	480/60I	VBS
6	INPUT480I-NTSC [A]	480/60I	VBS
7	INPUT480I-RGB [OP]	480/60I	RGB
8	INPUT480I-YUV [OP]	480/60I	YPbPr
9	INPUT576I-PAL [S]	576/50I	VBS
10	INPUT576I-PAL [A]	576/50I	VBS

Signal for adjustment: 100% full field color bar

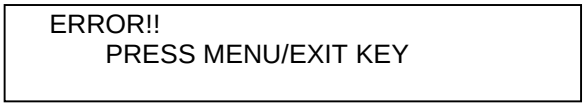
4. Confirm that the color bar is on the LCD and press [ENTER]. Measurement starts automatically.
5. Once measurement of one signal finishes, the next signal is displayed. Follow the instructions to select the type of signal on the test signal generator and press [ENTER].

NOTE:

*1. If in steps 4 and 5 the color bar fails to appear normally or messages fail to appear, press [v], or change to another signal then return to the correct signal, or disconnect the cables connecting the LCD and signal generator and then reconnect them.

*2. The message shown below appears when ACD adjustment couldn't be performed. Make sure the correct signal is being used or check the connections to BT-YA100P (component/RGB input unit).

*3. If this error occurs, start ADC adjustment from the beginning again.



6. All the measuring signals on the LCD change to green letters and the following message appears when measurement is complete.

ADJUST--COMPLETE!! PRESS ENTER KEY

7. Press [ENTER] to save the measurement data. The following message appears on the LCD when saving is complete. Press [MENU/EXIT] to finish the procedure.

WRITE EEPROM--COMPLETE!! PRESS MENU/EXIT KEY

SECTION 4

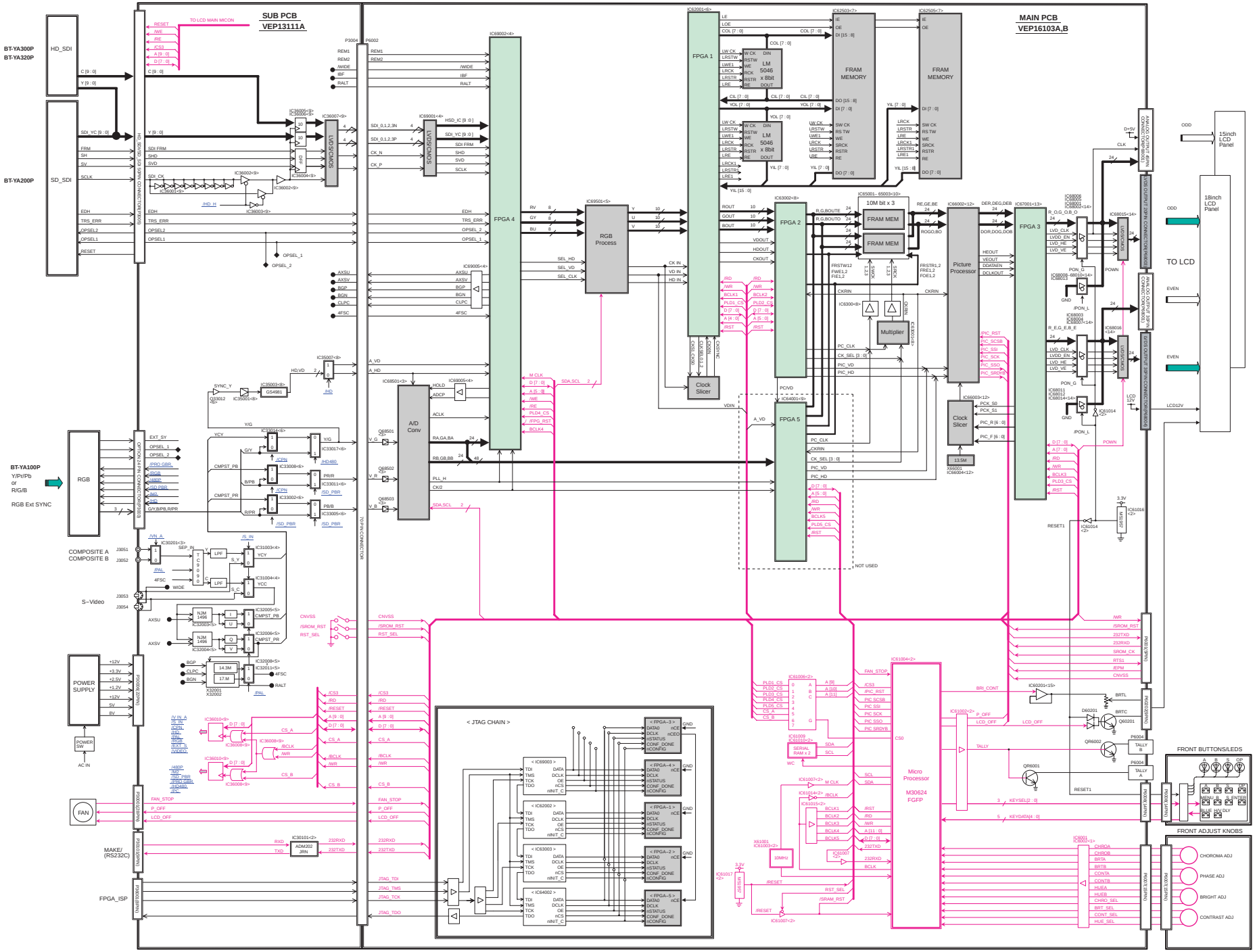
BLOCK DIAGRAMS

CONTENTS

BLOCK DIAGRAM BLK-1

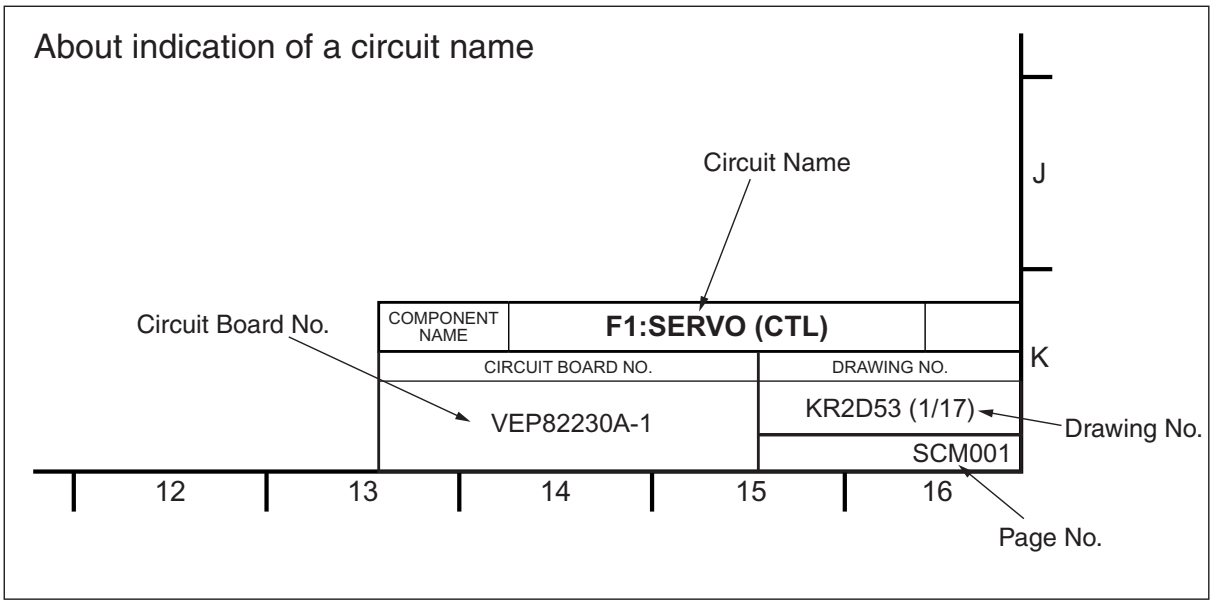
BLOCK DIAGRAM

BLK-1



SECTION 5

SCHEMATIC DIAGRAMS



NOTE:

NOTE:

BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST, SECTION7

CAUTION

THE ☐ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CONTENTS

BT-LH1800/1500

OVERALL

OVERALL (1/2) SCM001
OVERALL (2/2) SCM002

MAIN

MAIN (CONNECT) (1/15) SCM003
MAIN (CPU) (2/15) SCM004
MAIN (AD) (3/15) SCM005
MAIN (FPGA4) (4/15) SCM006
MAIN (RGB) (5/15) SCM007
MAIN (FPGA1) (6/15) SCM008
MAIN (MEMO1) (7/15) SCM009
MAIN (FPGA2) (8/15) SCM010
MAIN (FPGA5) (9/15) SCM011
MAIN (MEMO2) (10/15) SCM012
MAIN (FPGA2) (11/15) SCM013
MAIN (PIC) (12/15) SCM014
MAIN (FPGA3) (13/15) SCM015
MAIN (LVDS) (14/15) SCM016
MAIN (LIGHT) (15/15) SCM017

LCD_SUB

LCD_SUB (I/O) (1/9) SCM018
LCD_SUB (232C/TALLY) (2/9) SCM019
LCD_SUB (IN_SEL) (3/9) SCM020
LCD_SUB (YC_SEP) (4/9) SCM021
LCD_SUB (C_DEC) (5/9) SCM022
LCD_SUB (AD_LPF) (6/9) SCM023
LCD_SUB (PCIN) (7/9) SCM024
LCD_SUB (SYNC) (8/9) SCM025
LCD_SUB (SDI_IN) (9/9) SCM026

FRONT

FRONT (1/1) SCM027

VR

VR (1/1) SCM028

LED

LED (1/1) SCM029

AC SW

AC SW (1/1) SCM029

FAN CONNECT

FAN CONNECT (1/1) SCM029

POWER LED

POWER LED (1/1) SCM029

BT-YA100P

ANALOG

ANALOG (I/O) (1/4) SCM030
ANALOG (Y) (2/4) SCM031
ANALOG (PB) (3/4) SCM032
ANALOG (PR) (4/4) SCM033

BT-YA200P

SD SDI

SD_SDI (1/2) SCM034
SD_SDI (2/2) SCM035

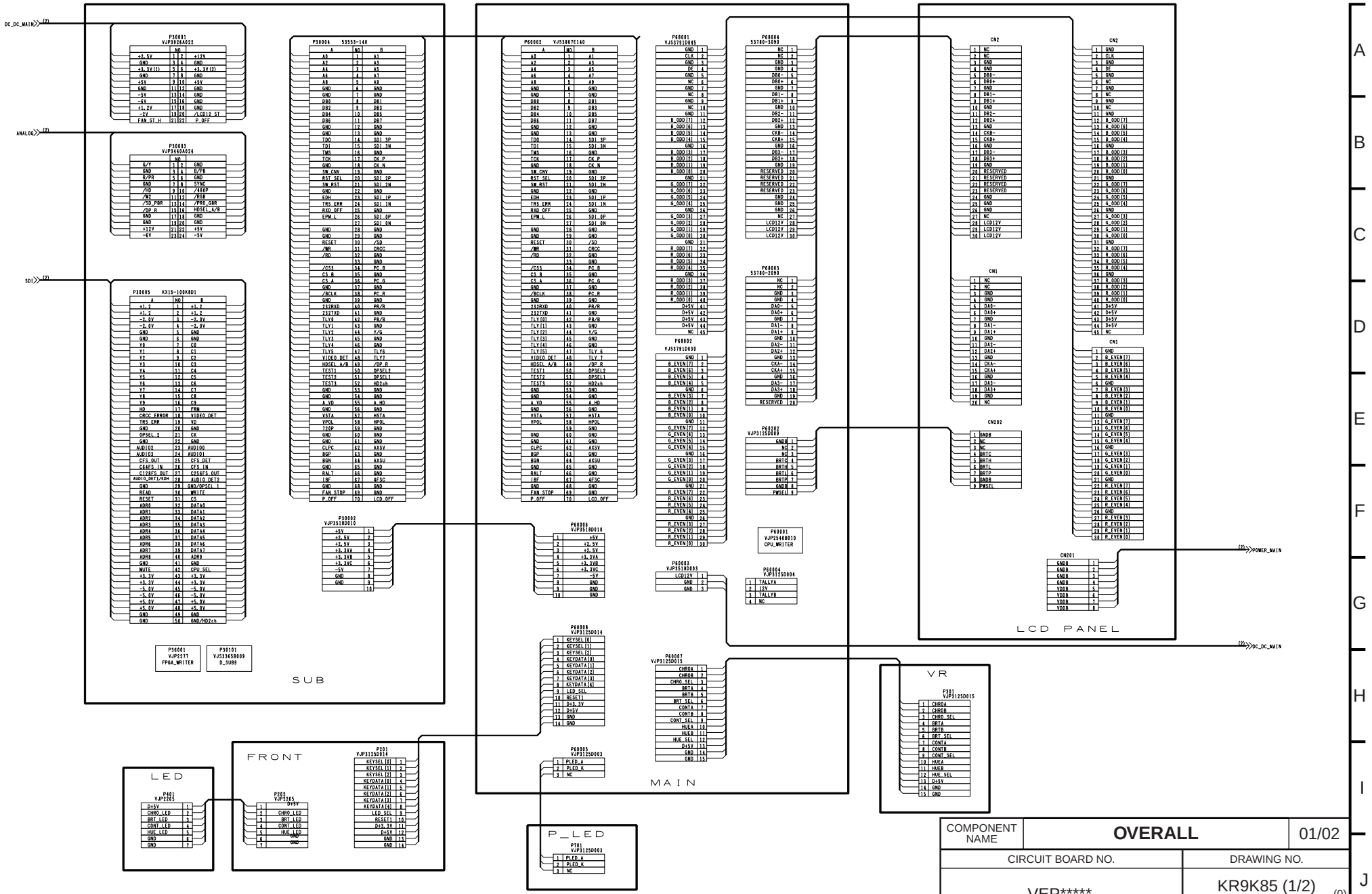
BT-YA300P/320P

HD SDI RX

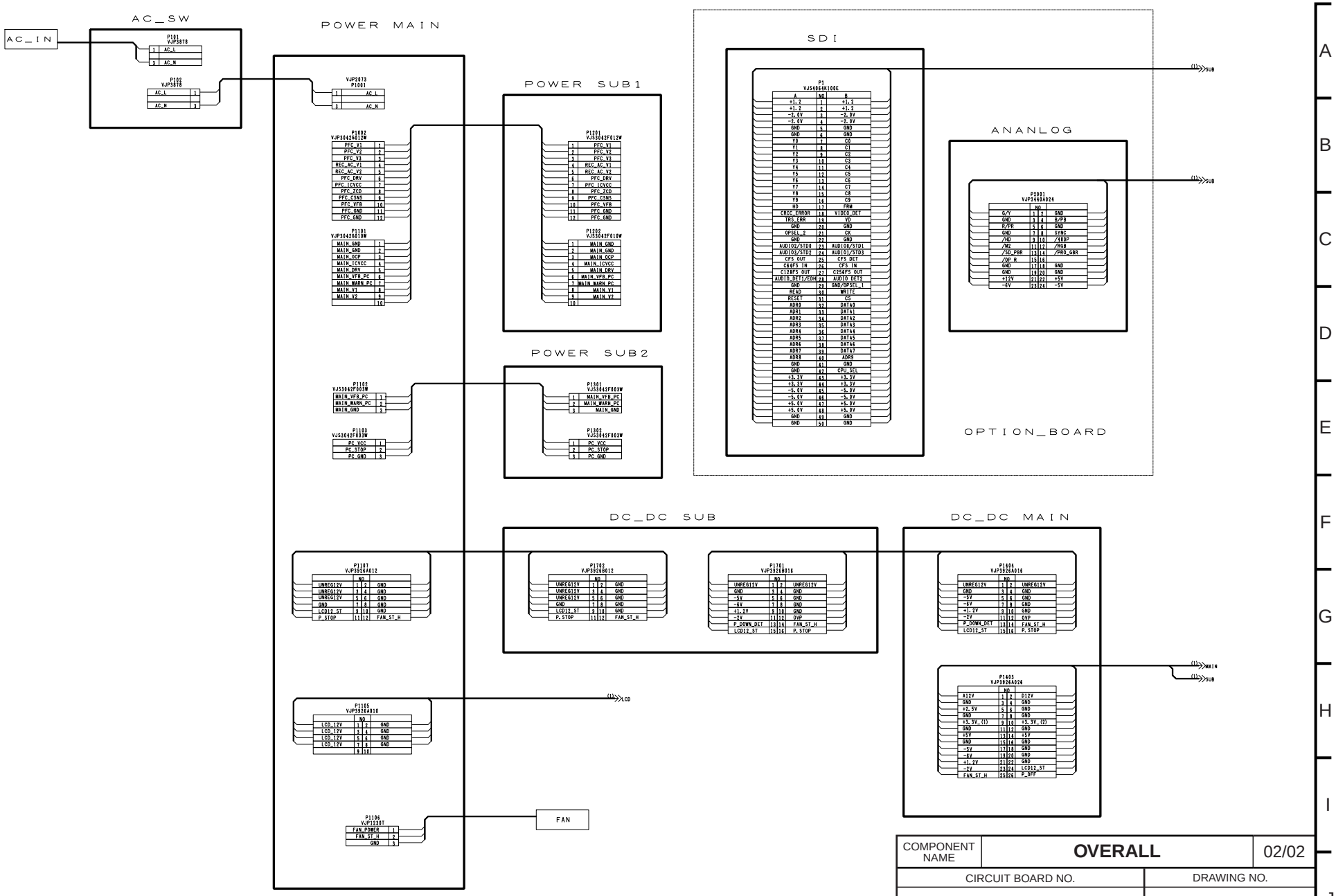
HD SDI RX (EQ) (1/3) SCM036
HD SDI RX (CKR,S/P) (2/3) SCM037
HD SDI RX (DEC) (3/3) SCM038

SDI 2CH SEL (BT-YA320P ONLY)

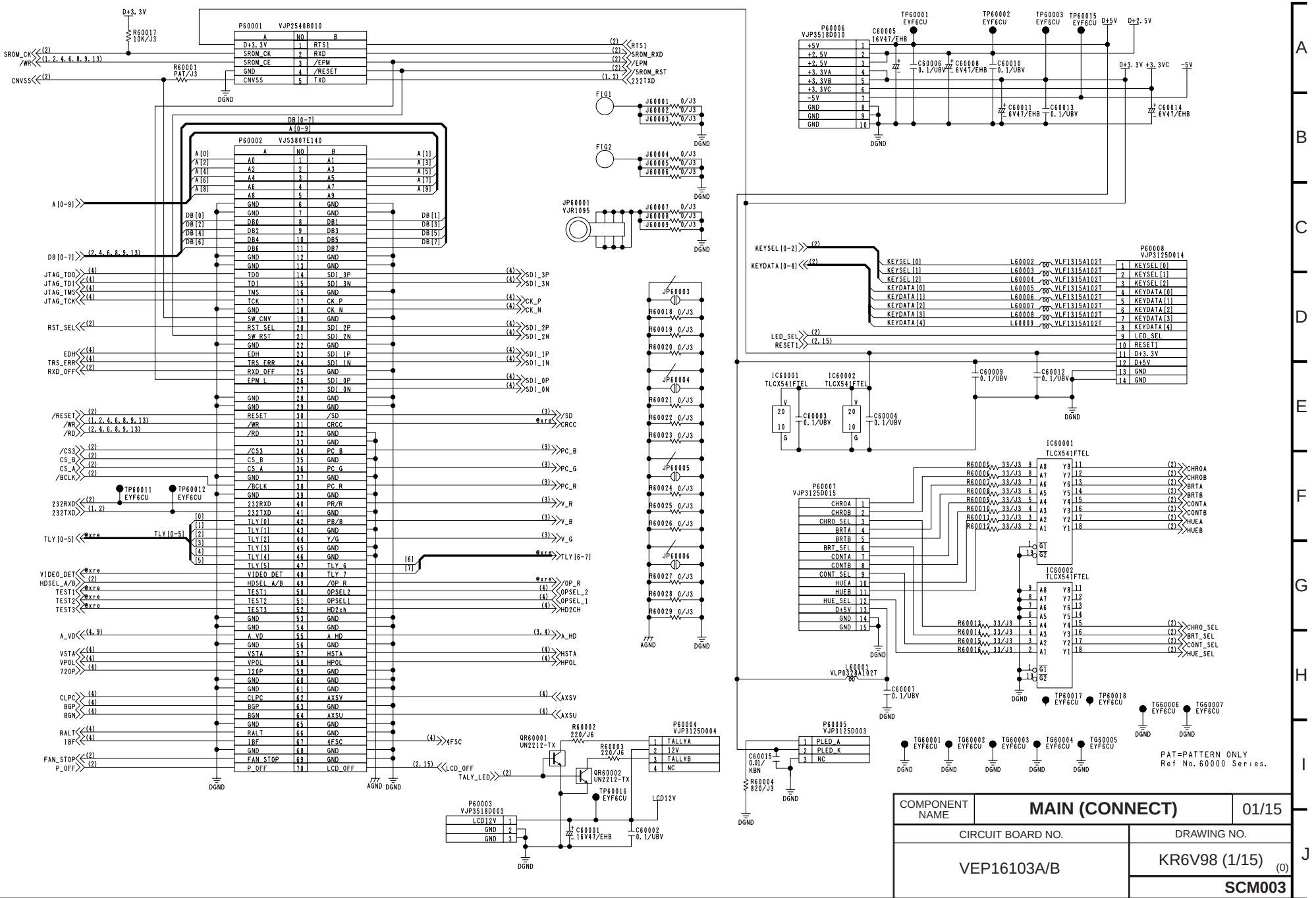
SDI 2CH SEL (1/1) SCM039

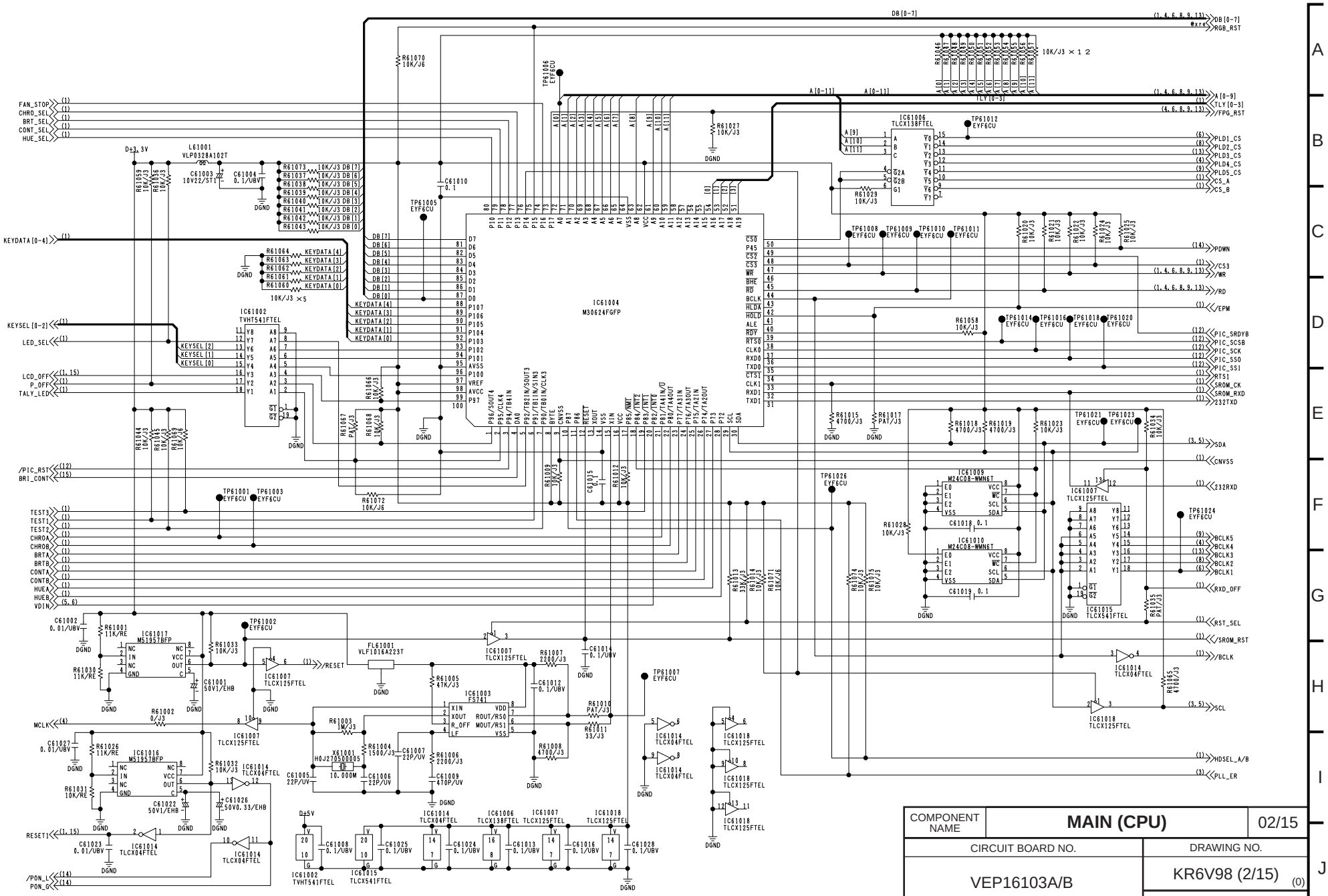


COMPONENT NAME	**OVERALL**		01/02
CIRCUIT BOARD NO.		DRAWING NO.	
VEP*****		KR9K85 (1/2) (0)	
		SCM001	

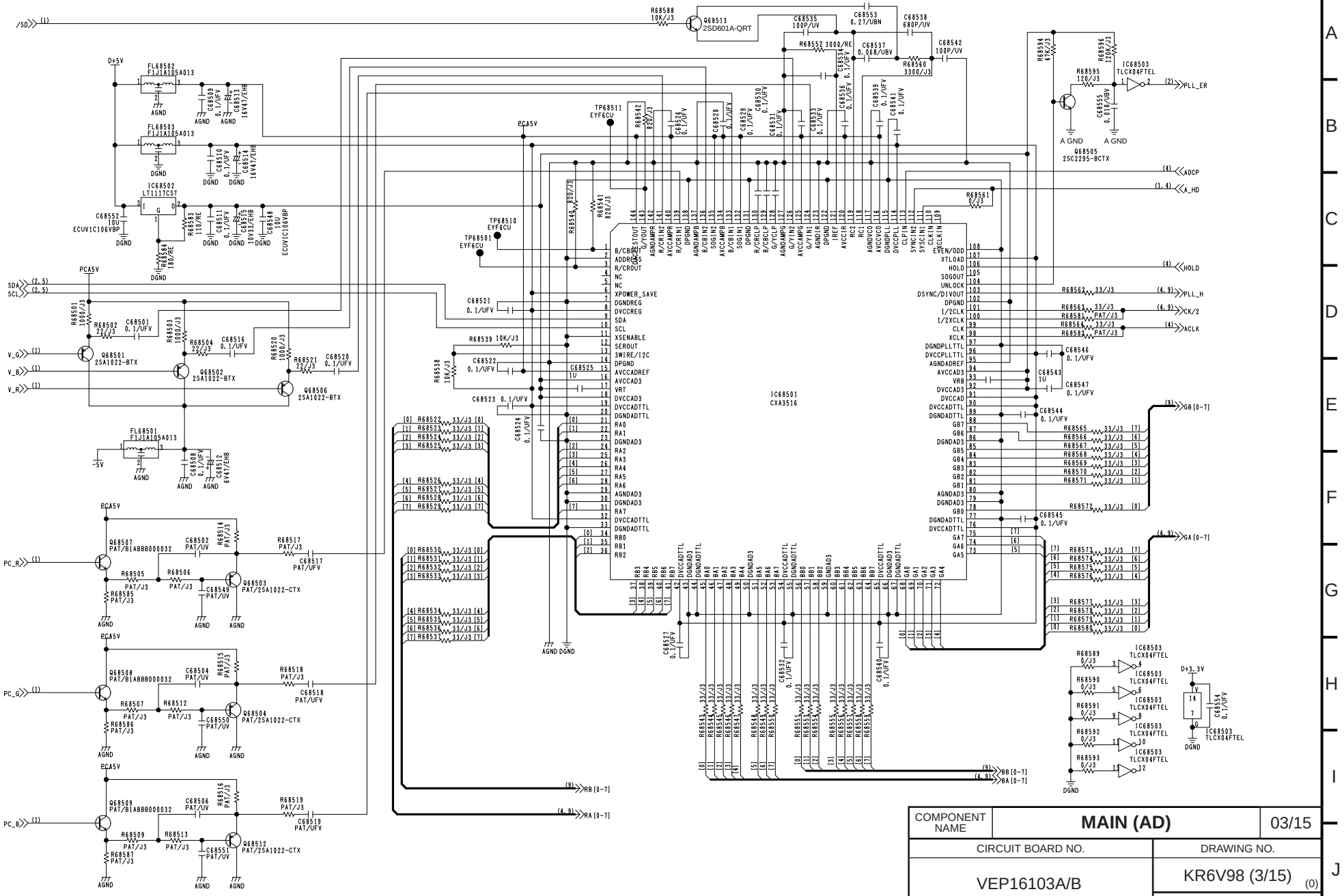


COMPONENT NAME	OVERALL	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP*****		KR9K85 (2/2) (0)
		SCM002

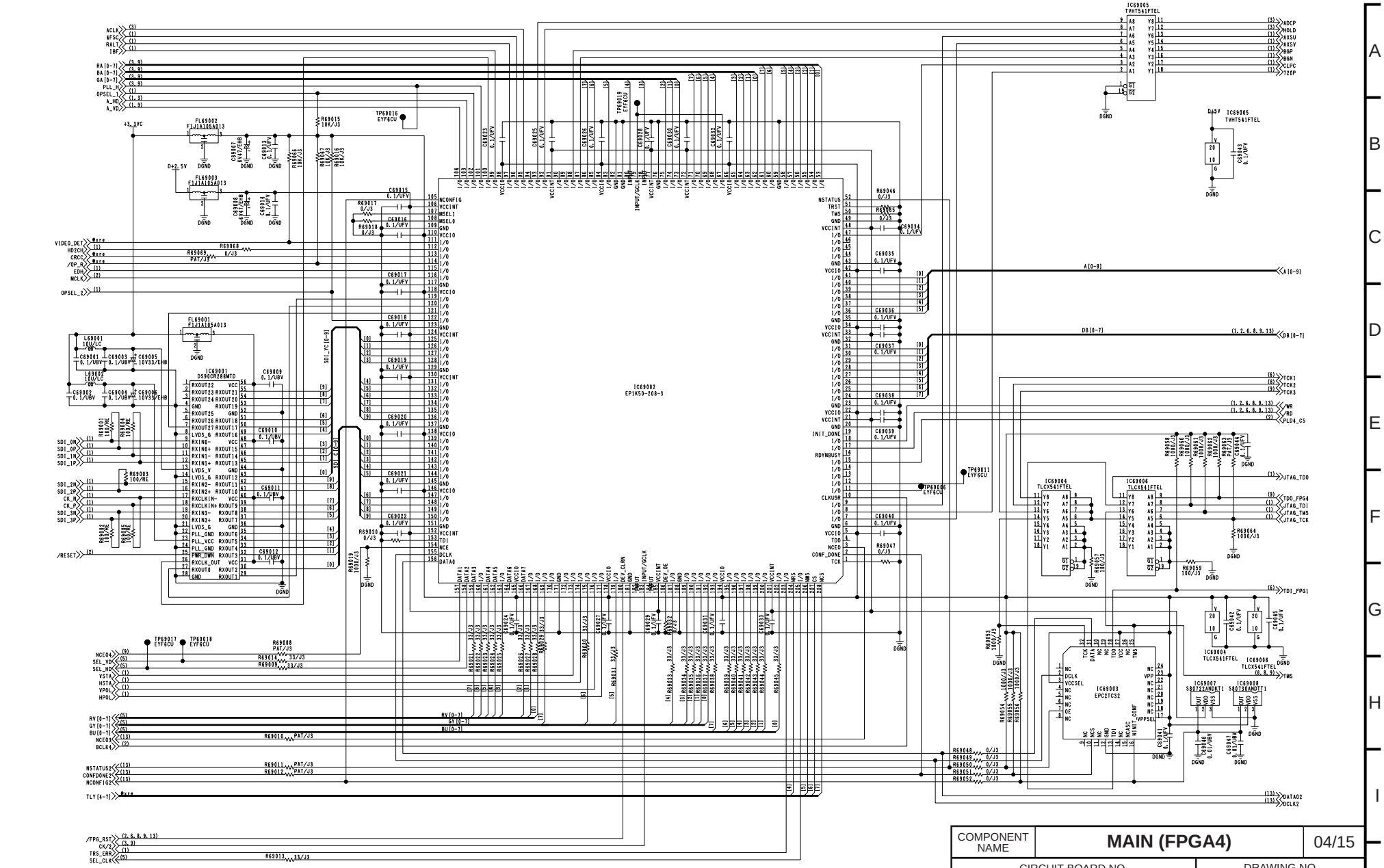

P60001 VJP2540B010
P60002 VJS3807E140
P60003 VJP3518D003
P60004 VJP3125D004
P60005 VJP3125D003
P60006 VJP3518D010
P60007 VJP3125D015
P60008 VJP3125D014
IC60001 TLCX541FTEL
IC60002 TLCX541FTEL
L60001 VLP0328A102T
JP60001 VJR1095
FIG1
FIG2
COMPONENT NAME
MAIN (CONNECT)
01/15
CIRCUIT BOARD NO.
VEP16103A/B
DRAWING NO.
KR6V98 (1/15) (0)
SCM003
PAT=PATTERN ONLY
Ref No. 60000 Series.



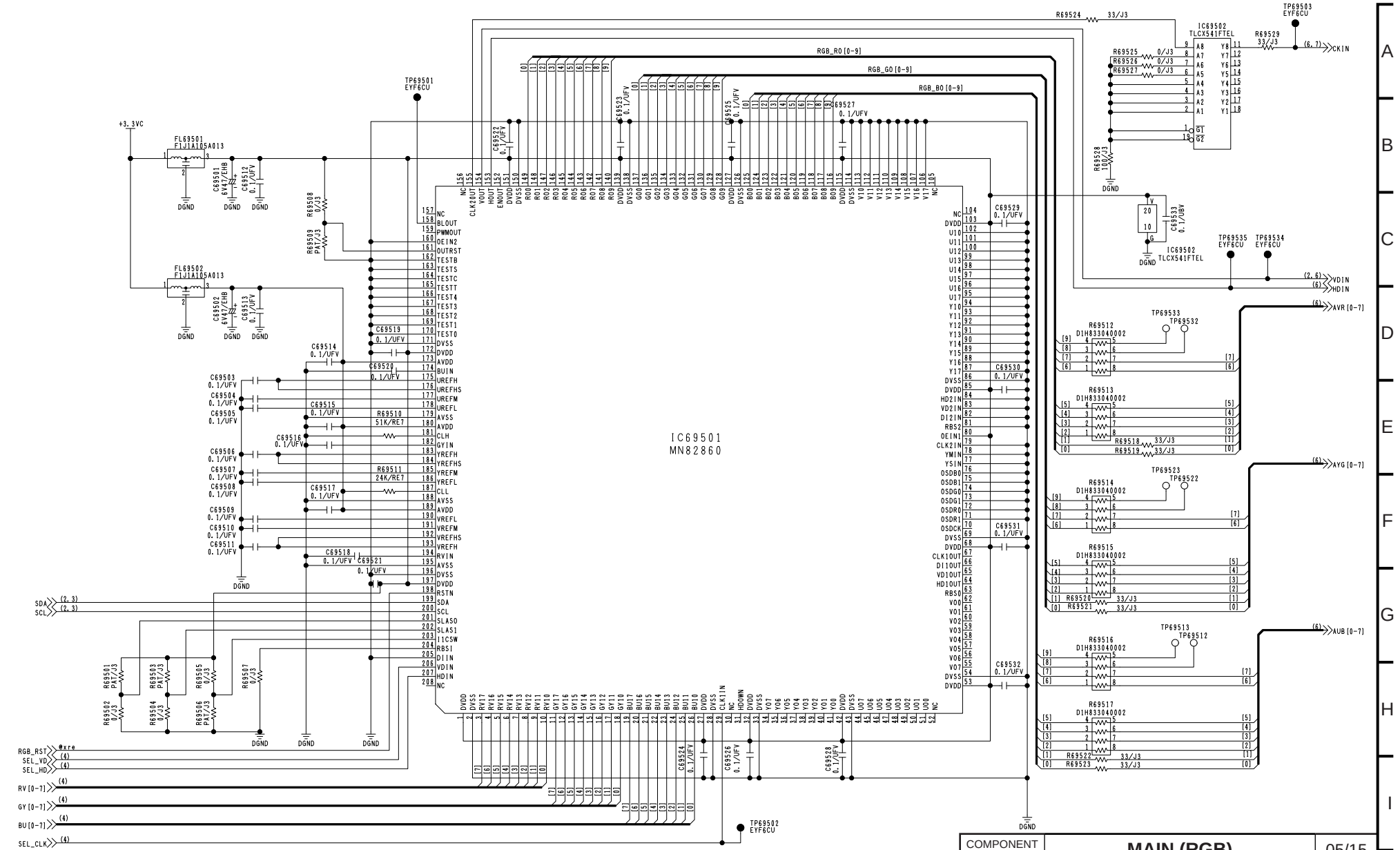
COMPONENT NAME	**MAIN (CPU)**	02/15
CIRCUIT BOARD NO.	DRAWING NO.	
VEP16103A/B	KR6V98 (2/15) (0)	
	SCM004	



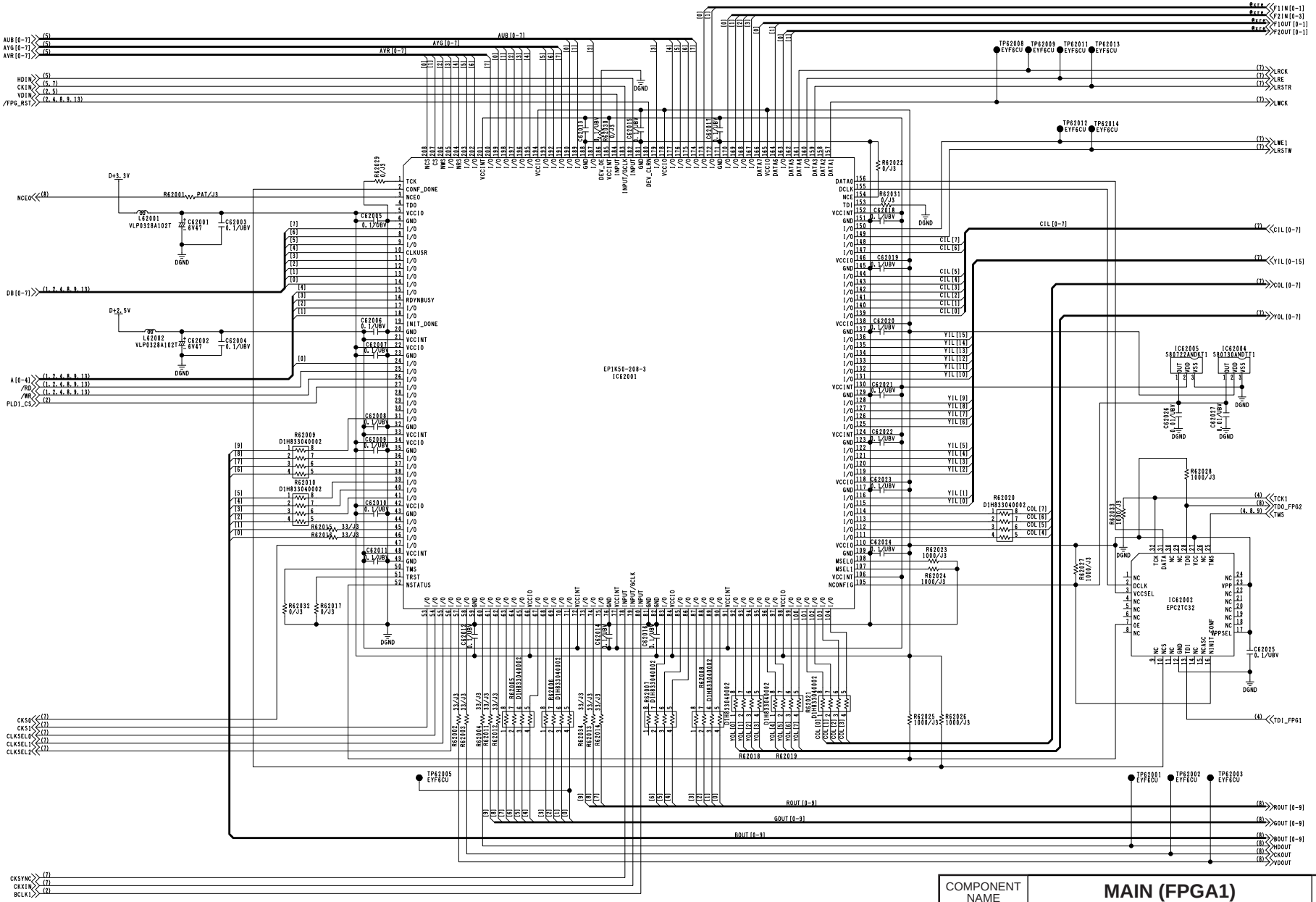
COMPONENT NAME	**MAIN (AD)**	03/15
CIRCUIT BOARD NO.	DRAWING NO.	
VEP16103A/B	KR6V98 (3/15) (0)	
	SCM005	



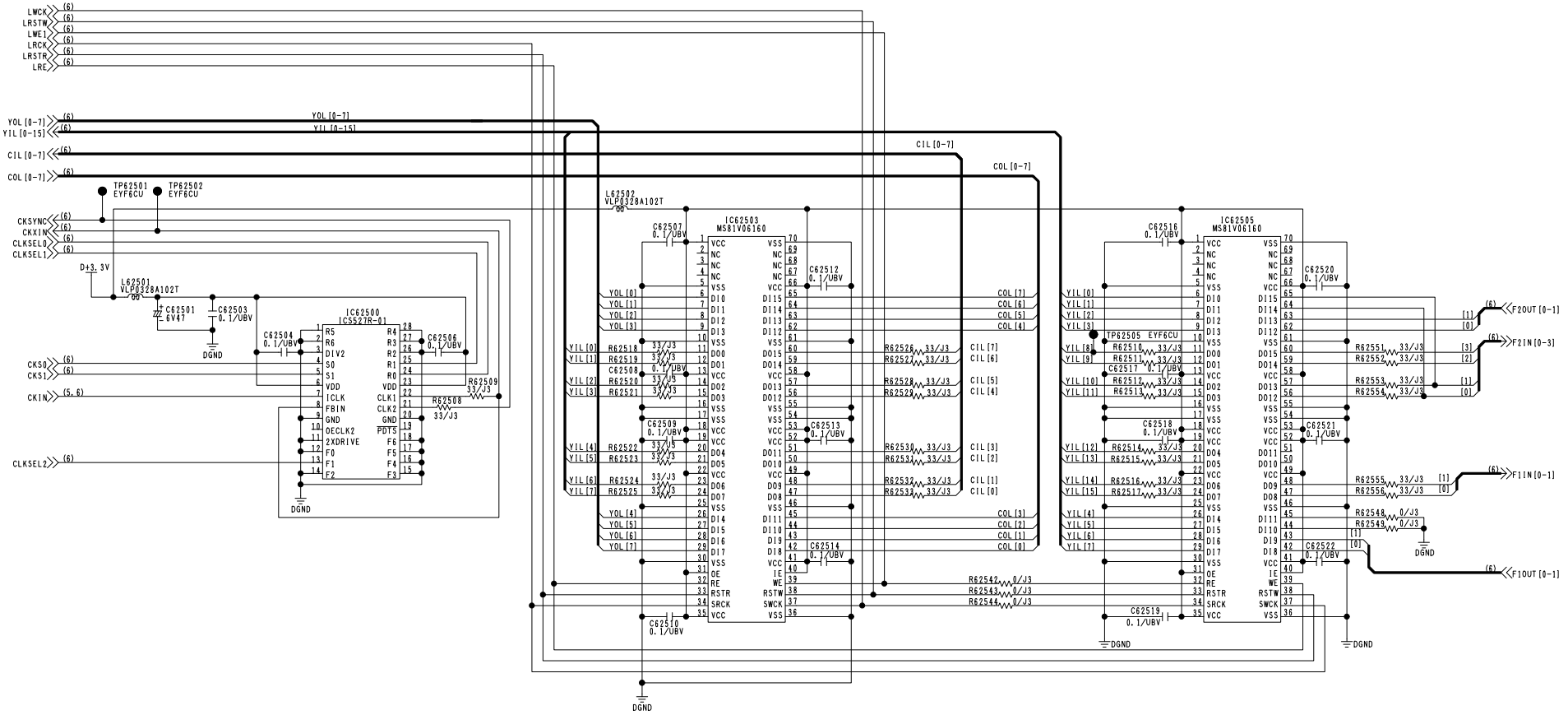
COMPONENT NAME	MAIN (FPGA4)	04/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (4/15) (0)
		SCM006



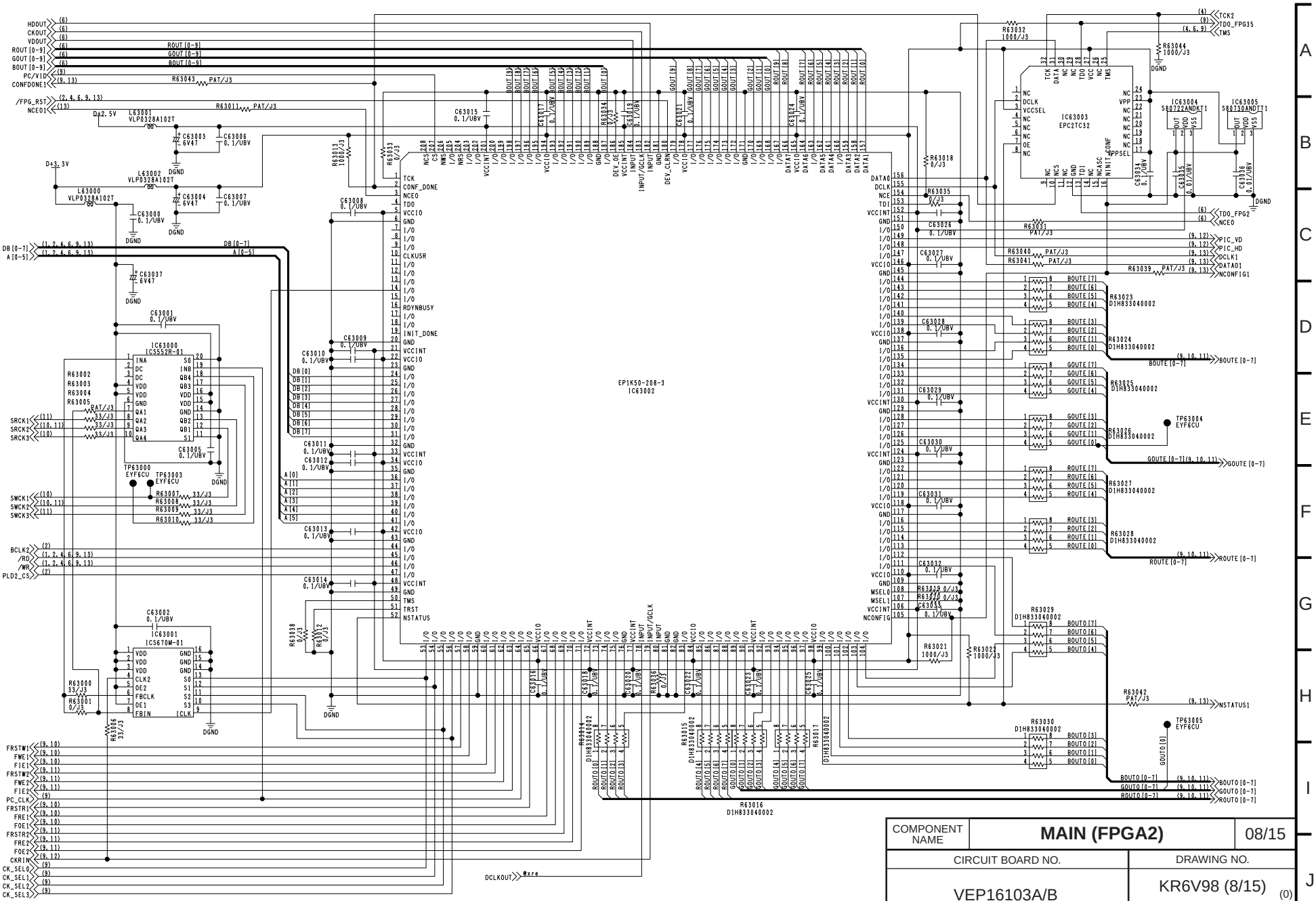
COMPONENT NAME	**MAIN (RGB)**	05/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (5/15) (0)
		SCM007

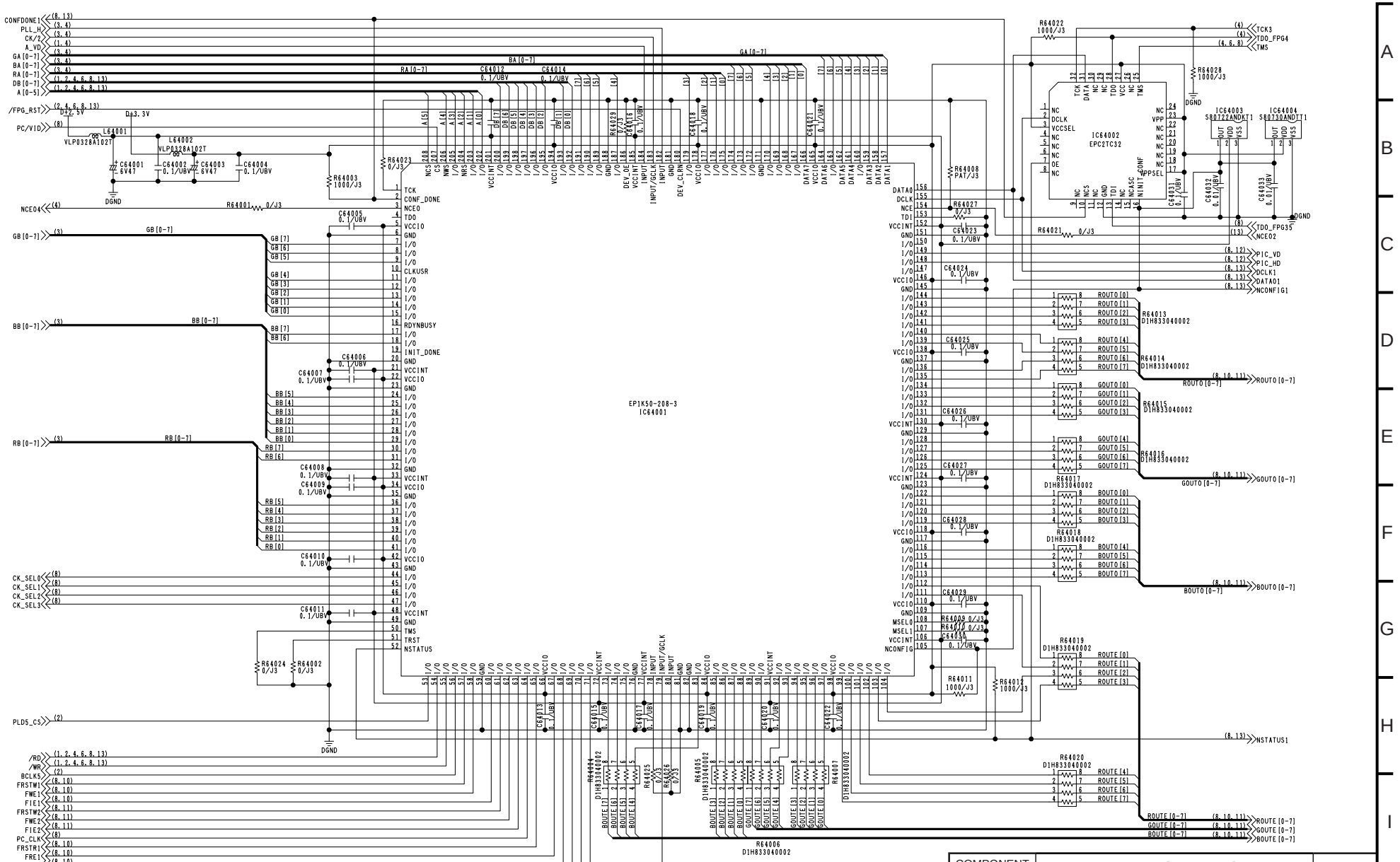


COMPONENT NAME	MAIN (FPGA1)	06/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (6/15) (0)
		SCM008

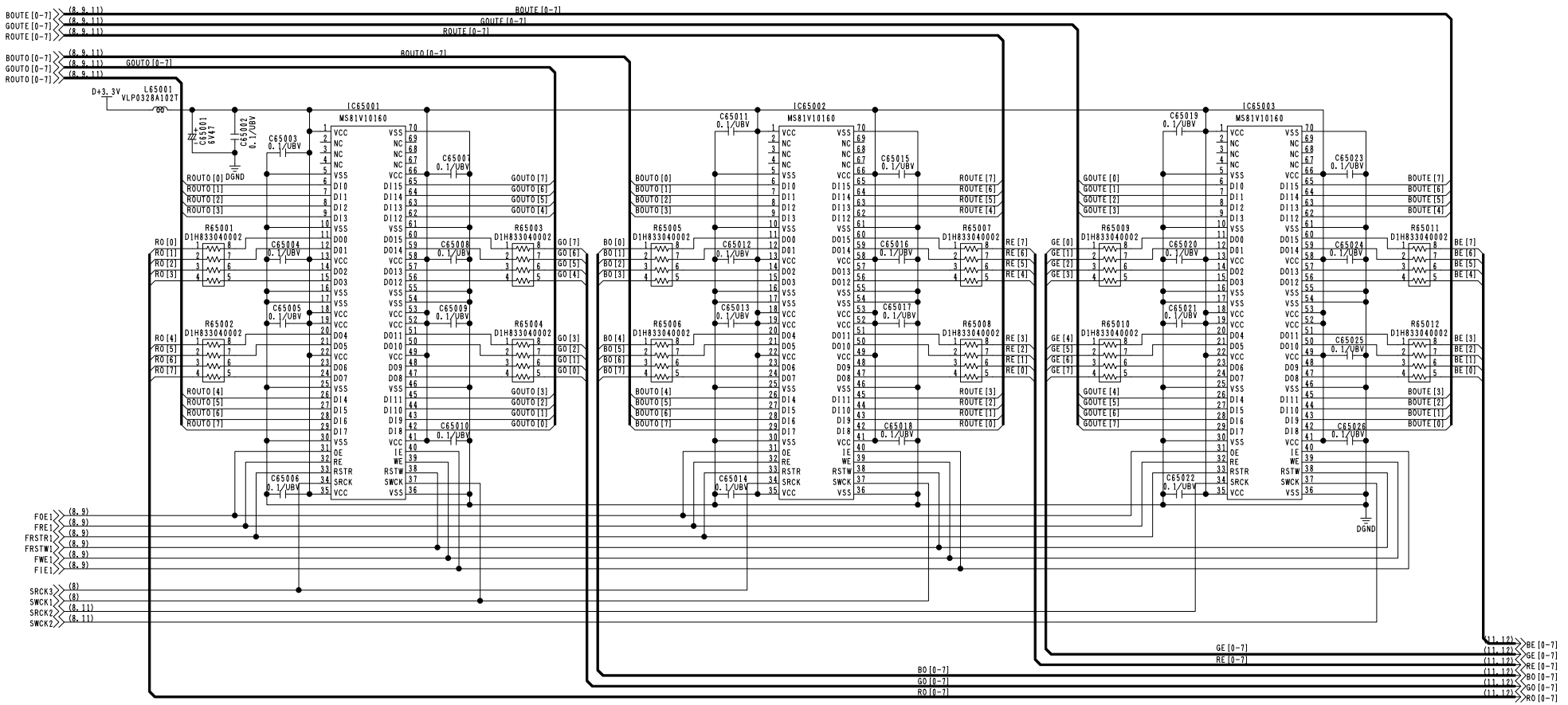


COMPONENT NAME	**MAIN (MEMO1)**	07/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (7/15) (0)
		SCM009

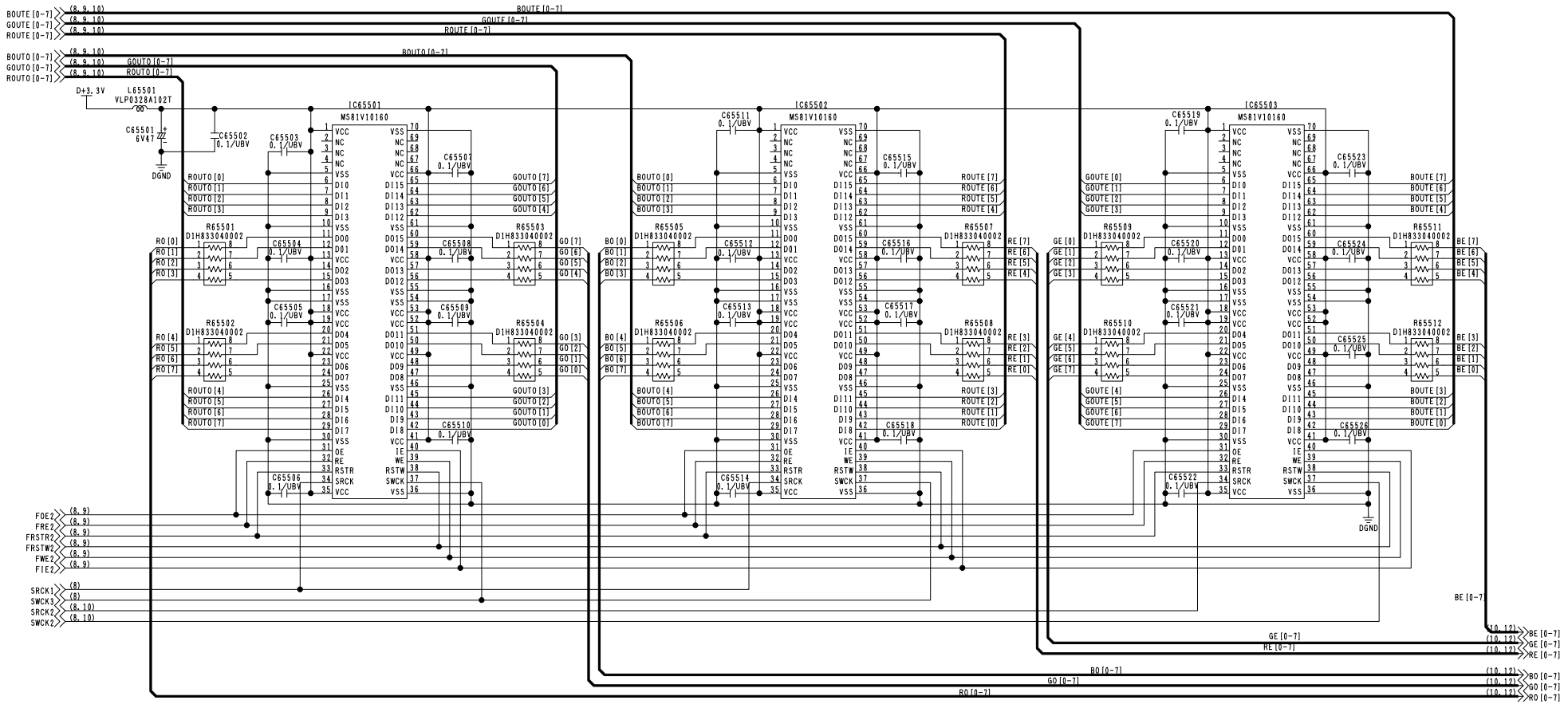

IC63002
EP1K50-208-3
IC63003
EPC2TC32
IC63000
IC5552R-01
IC63001
IC5670M-01
IC63004
S80722ANDKT1
IC63005
S80730ANDIT1
TP63000
TP63003
TP63004
TP63005
R63023
R63024
R63025
R63026
R63027
R63028
R63029
R63030
R63016
D1H833040002
L63000
L63001
L63002
VLP0328A102T
C63000
C63001
C63002
C63003
C63004
C63005
C63006
C63007
C63008
C63009
C63010
C63011
C63012
C63013
C63014
C63015
C63016
C63017
C63018
C63019
C63020
C63021
C63022
C63023
C63024
C63025
C63026
C63027
C63028
C63029
C63030
C63031
C63032
C63033
C63034
C63035
C63036
C63037
R63000
R63001
R63002
R63003
R63004
R63005
R63006
R63007
R63008
R63009
R63010
R63011
R63012
R63013
R63014
R63015
R63017
R63018
R63019
R63020
R63021
R63022
R63030
R63031
R63032
R63033
R63034
R63035
R63036
R63037
R63038
R63039
R63040
R63041
R63042
R63043
R63044
PAT/J3
1000/J3
0/J3
33/J3
6V47
0.1/UBV
D+2.5V
D+3.3V
DGND
HDOUT
CKOUT
VDOUT
ROUT [0-9]
GOUT [0-9]
BOUT [0-9]
PC/VID
CONFDONE1
/FPG_RST
NCEO1
DB [0-7]
A [0-5]
SRCK1
SRCK2
SRCK3
SWCK1
SWCK2
SWCK3
BCLK2
/RD
/WR
PLD2_CS
FRSTW1
FWE1
FIE1
FRSTW2
FWE2
FIE2
PC_CLK
FRSTR1
FRE1
FOE1
FRSTR2
FRE2
FOE2
CKRIN
CK_SEL0
CK_SEL1
CK_SEL2
CK_SEL3
DCLKOUT
TCK2
TDO_FPG35
TMS
TDO_FPG2
NCEO
P1C_VD
P1C_HD
DCLK1
DATA01
NCONFIG1
NSTATUS1
FPPSEL
TCK
TDI
TDO
NC
DCLK
NCE
VCCINT
VCCIO
GND
I/O
CLKUSR
RDYNBUSY
INIT_DONE
TMS
TRST
NSTATUS
MSEL0
MSEL1
NCONFIG
DATA0
DATA1
DATA2
DATA3
DATA4
DATA5
DATA6
DATA7
DEV_OE
DEV_CLRN
INPUT/GCLK
COMPONENT NAME
MAIN (FPGA2)
08/15
CIRCUIT BOARD NO.
VEP16103A/B
DRAWING NO.
KR6V98 (8/15) (0)
SCM010



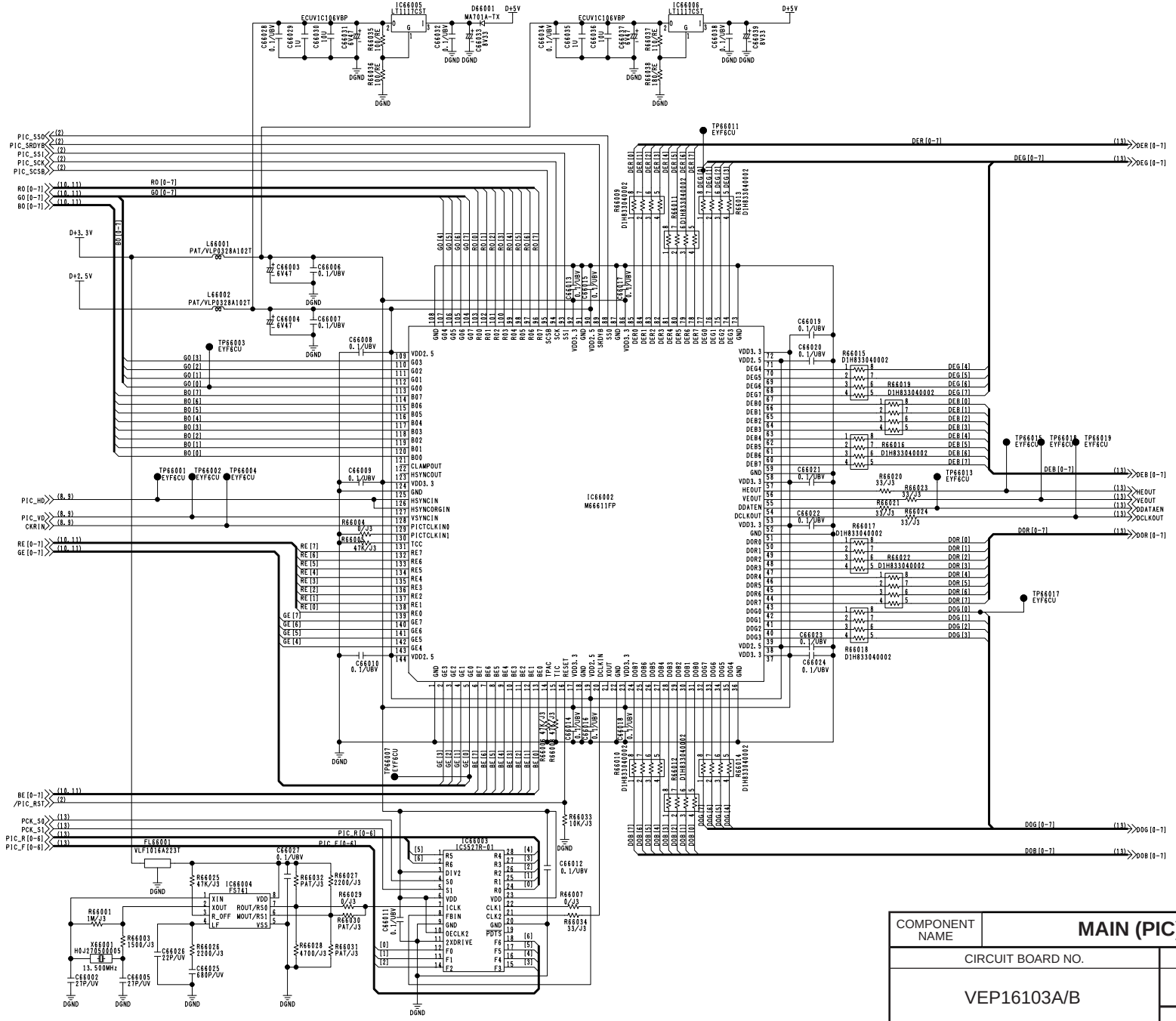
COMPONENT NAME	MAIN (FPGA5)	09/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (9/15) (0)
		SCM011



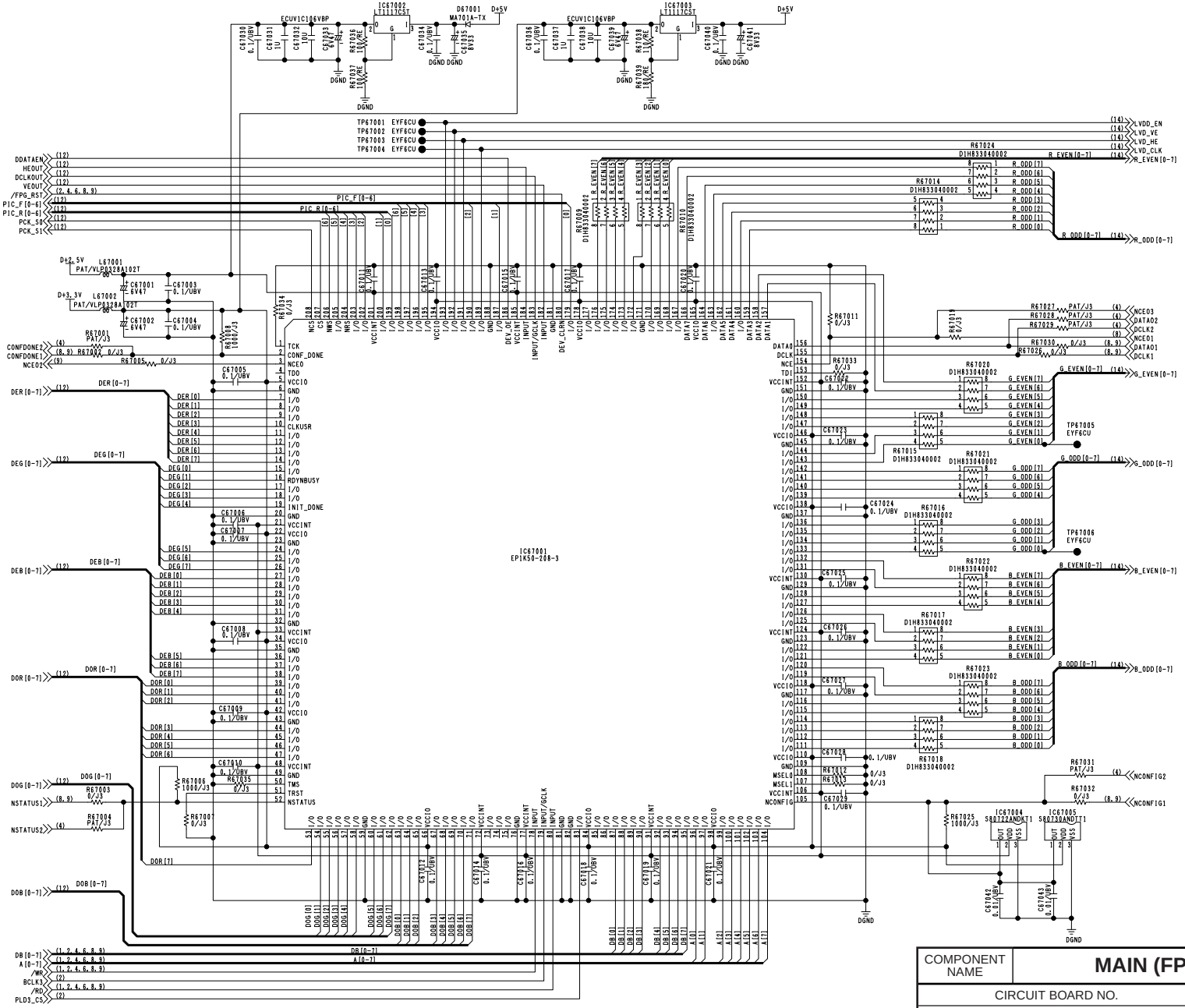
COMPONENT NAME	MAIN (MEMO2)	10/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (10/15) (0)
		SCM012



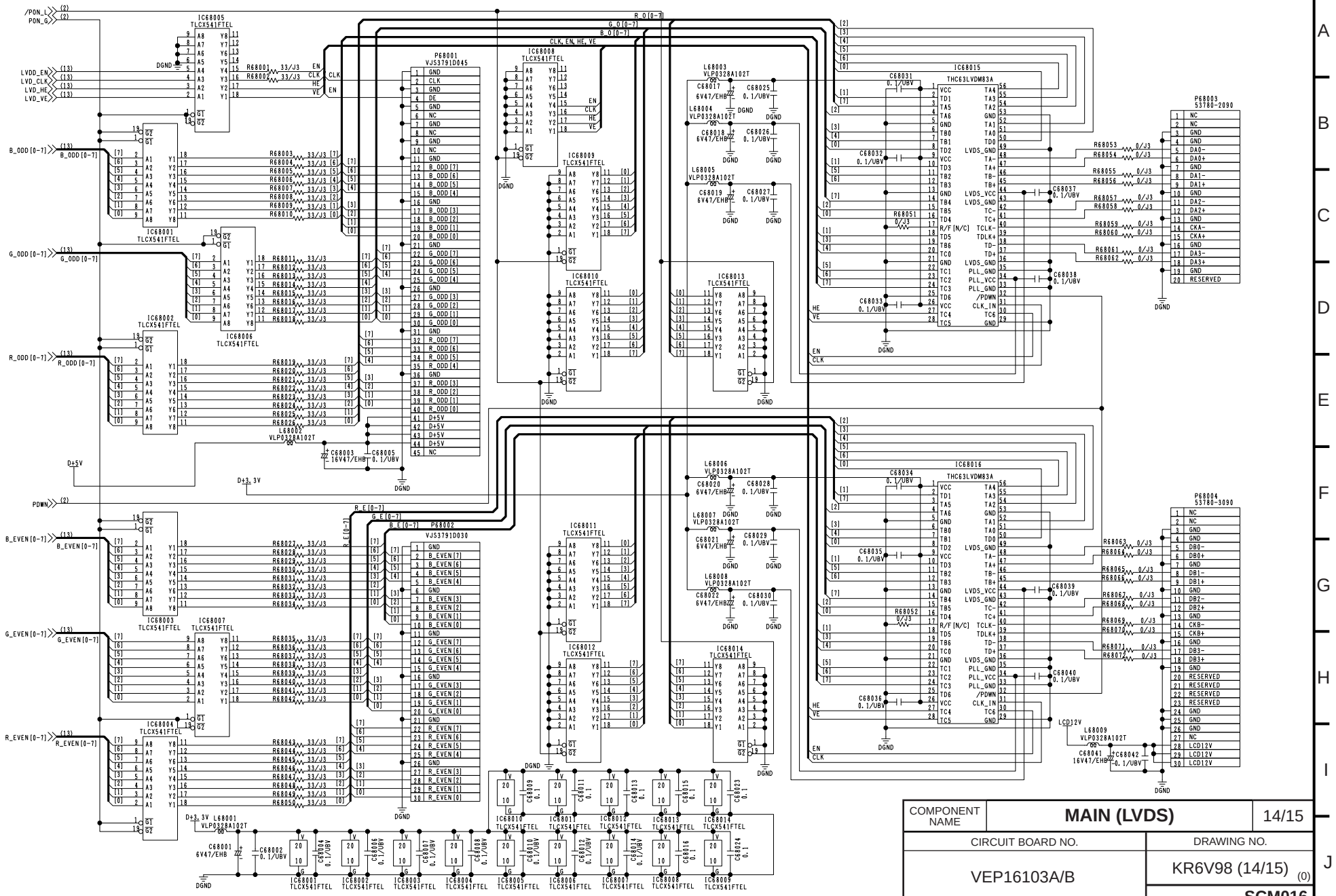
COMPONENT NAME	MAIN (FPGA2)	11/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (11/15) (0)
		SCM013



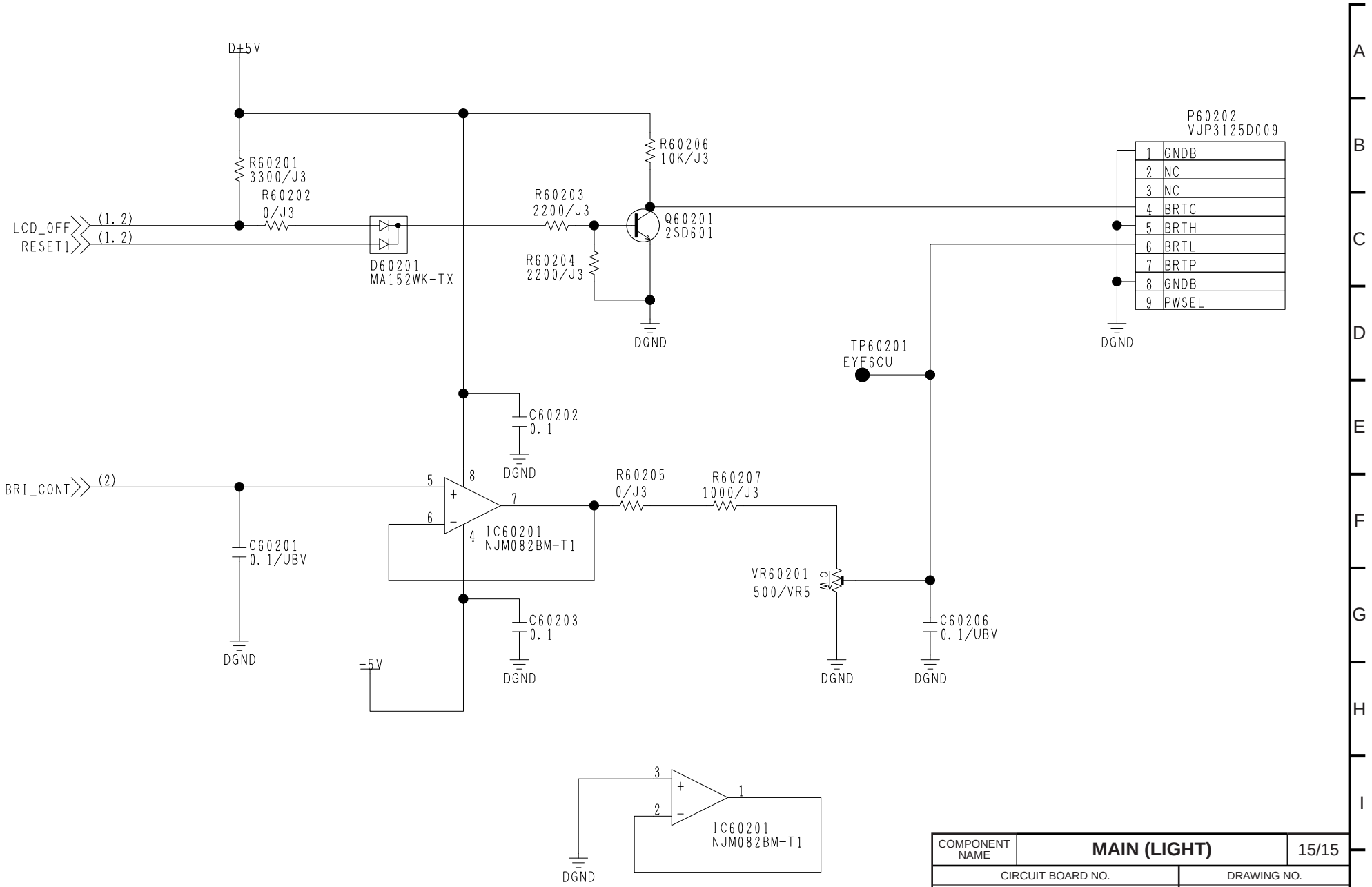
COMPONENT NAME	**MAIN (PIC)**	12/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (12/15) (0)
		SCM014



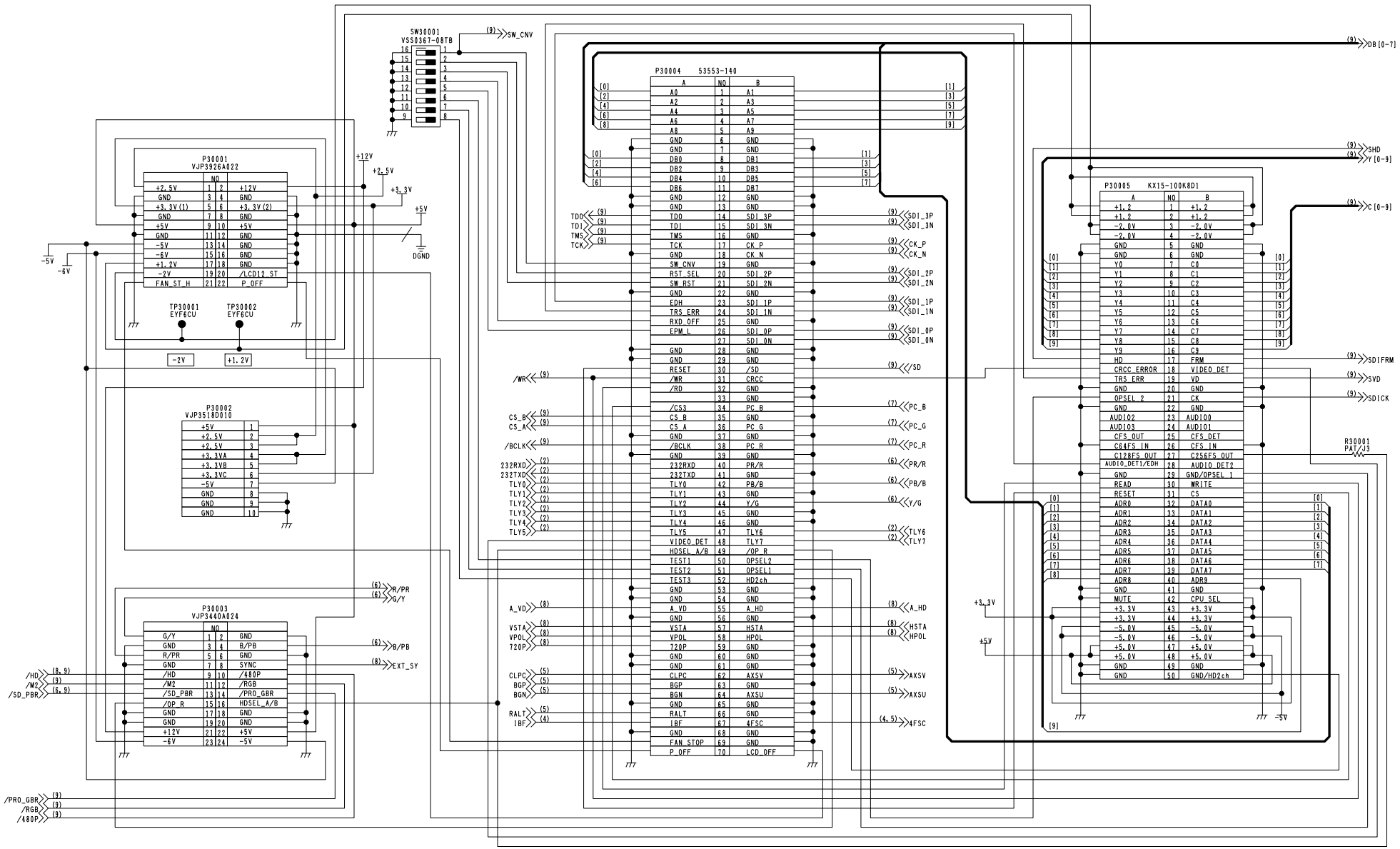
COMPONENT NAME	**MAIN (FPGA3)**	13/15
CIRCUIT BOARD NO.	DRAWING NO.	
VEP16103A/B	KR6V98 (13/15) (0)	
	SCM015	



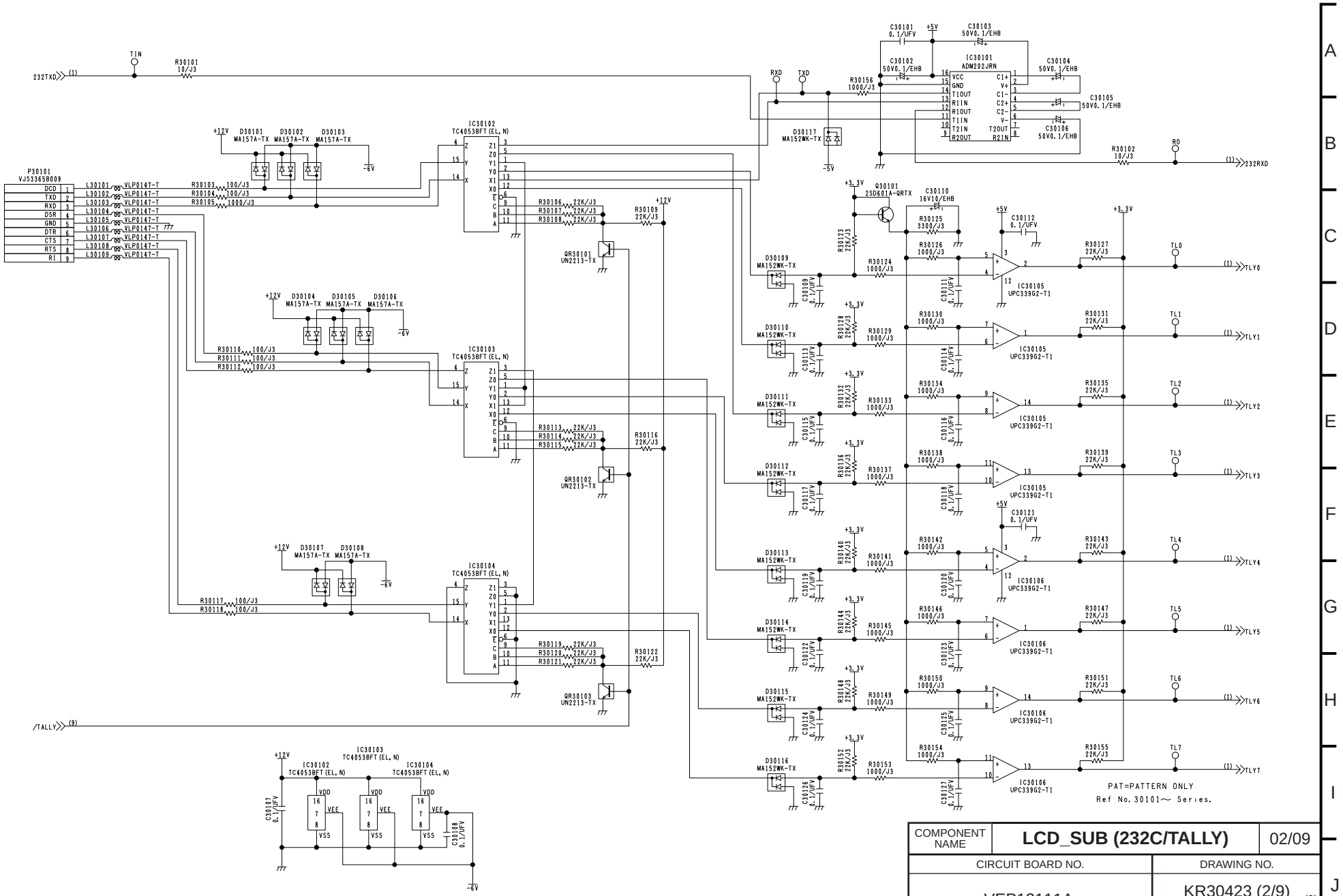
COMPONENT NAME	**MAIN (LVDS)**	14/15
CIRCUIT BOARD NO.		DRAWING NO.
VEP16103A/B		KR6V98 (14/15) (0)
		SCM016



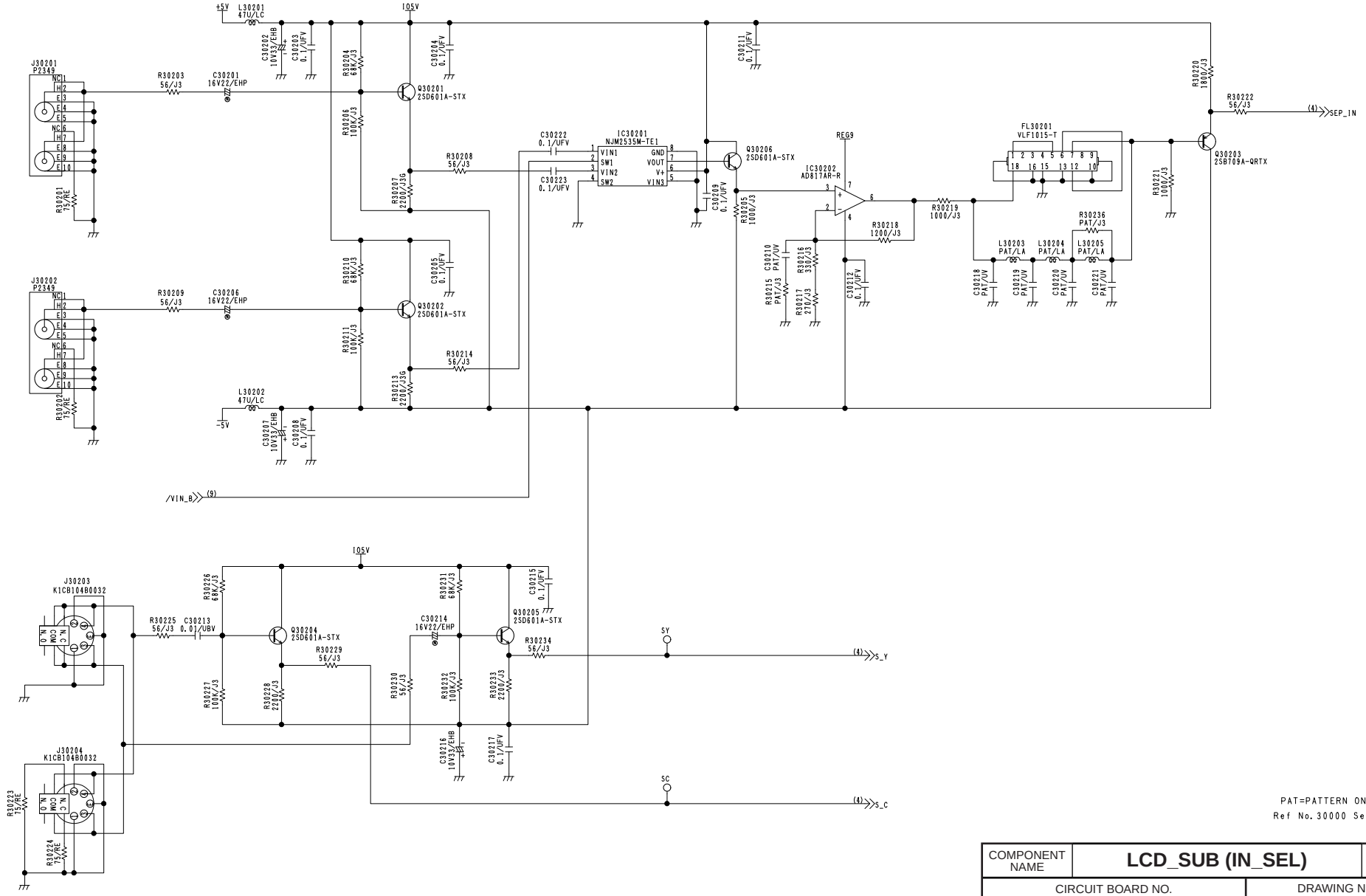
COMPONENT NAME	**MAIN (LIGHT)**	15/15
CIRCUIT BOARD NO.	DRAWING NO.	
VEP16103A/B	KR6V98 (15/15) (0)	
	SCM017	



COMPONENT NAME	**LCD_SUB (I/O)**	01/09
CIRCUIT BOARD NO.	DRAWING NO.	
VEP13111A	KR30423 (1/9) (0)	
	SCM018	



COMPONENT NAME	**LCD_SUB (232C/TALLY)**	02/09
CIRCUIT BOARD NO.	DRAWING NO.	
VEP13111A	KR30423 (2/9) (0)	
	SCM019	

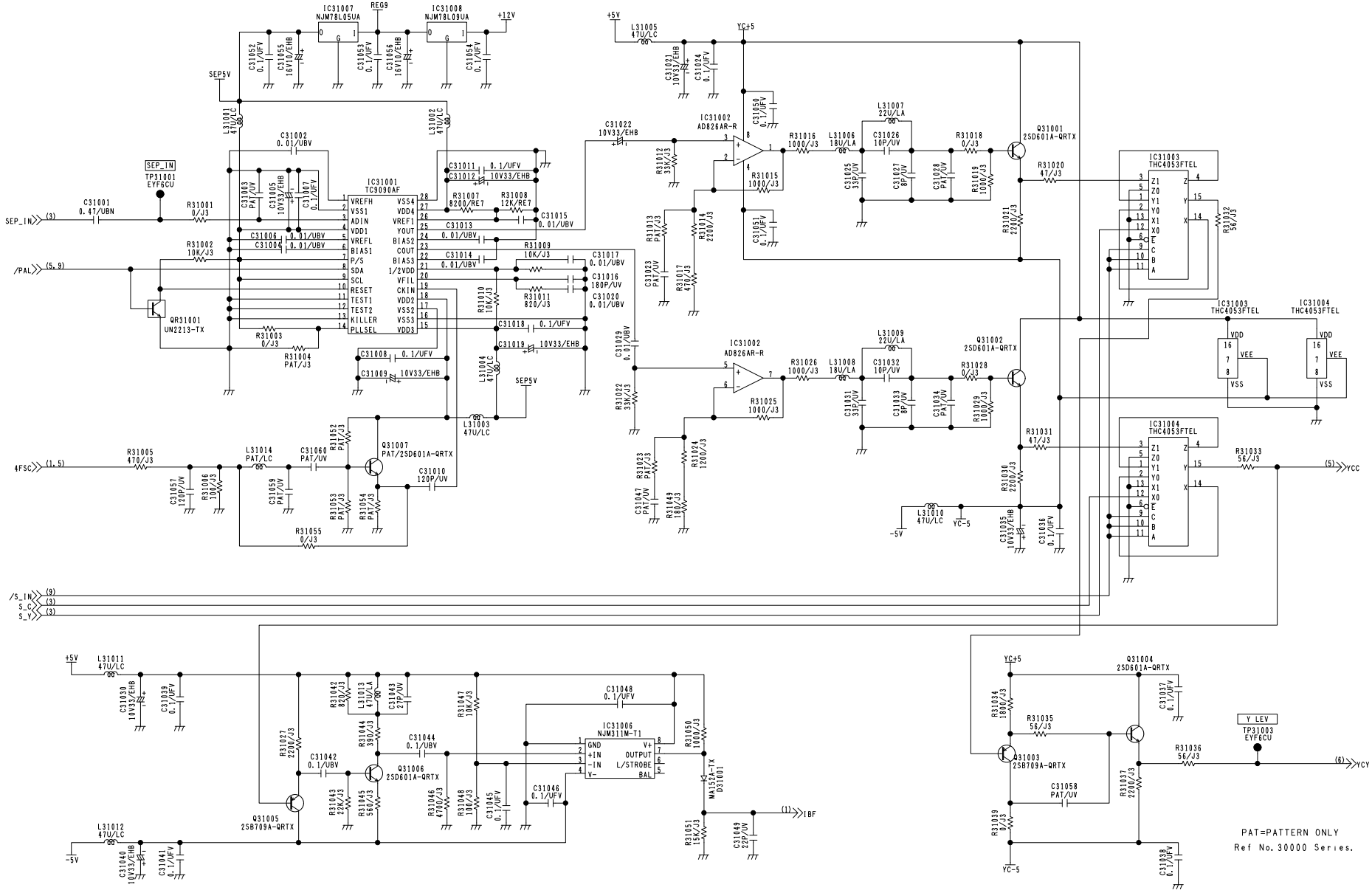


PAT=PATTERN ONLY
Ref No. 30000 Series.

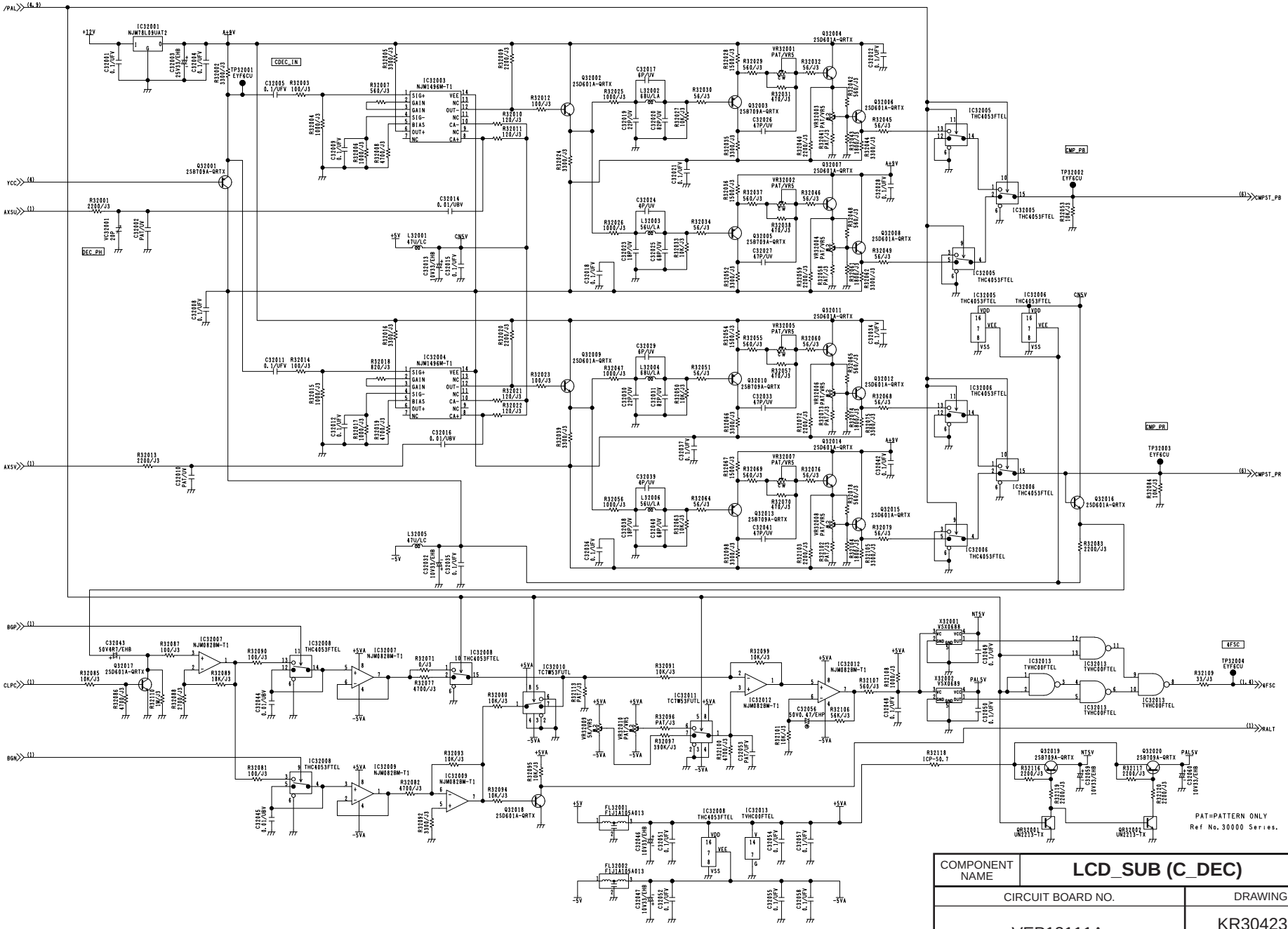
COMPONENT NAME	LCD_SUB (IN_SEL)	03/09
CIRCUIT BOARD NO.		DRAWING NO.
VEP13111A		KR30423 (3/9) (0)
		SCM020

A B C D E F G H I J

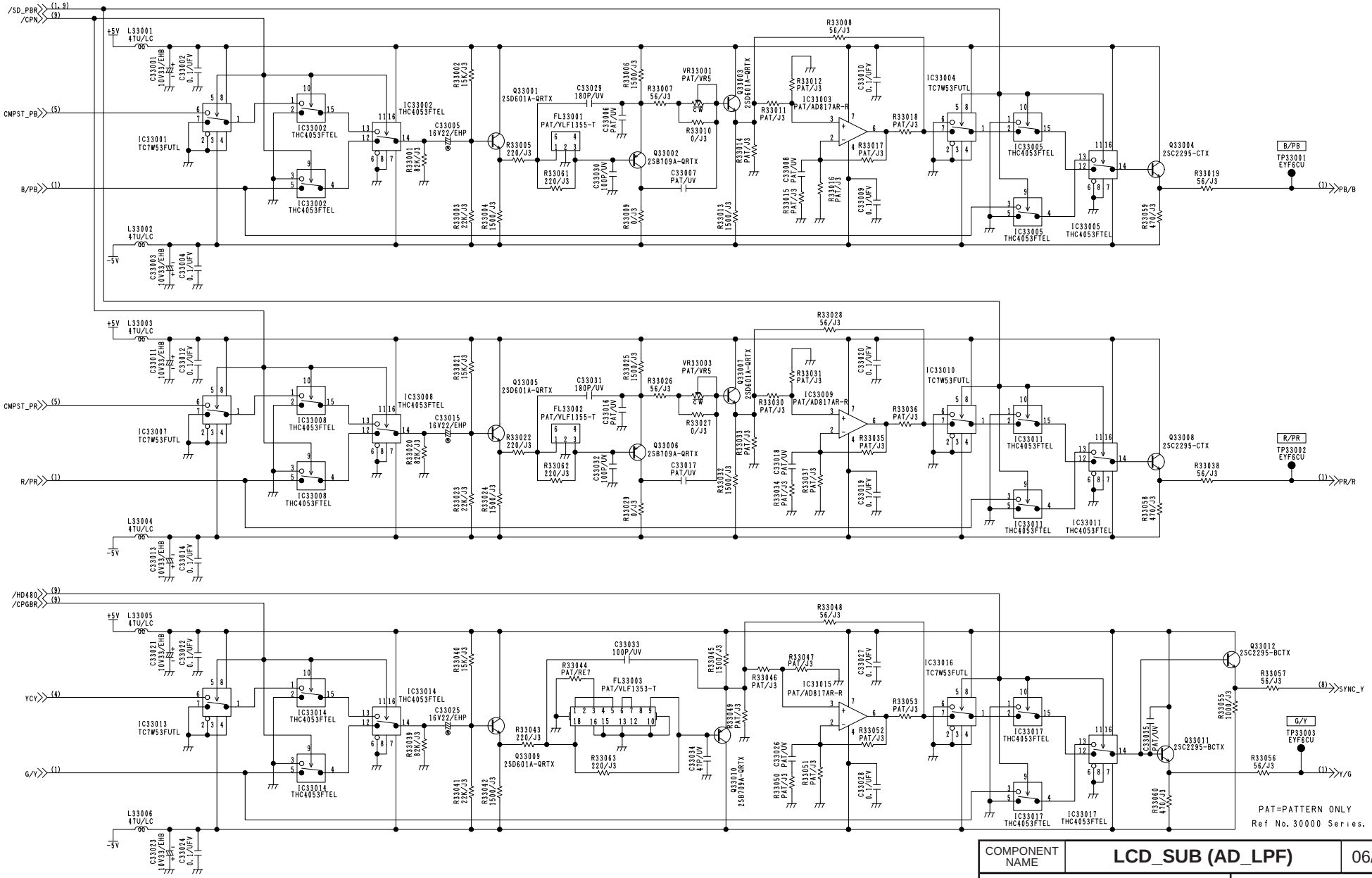
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



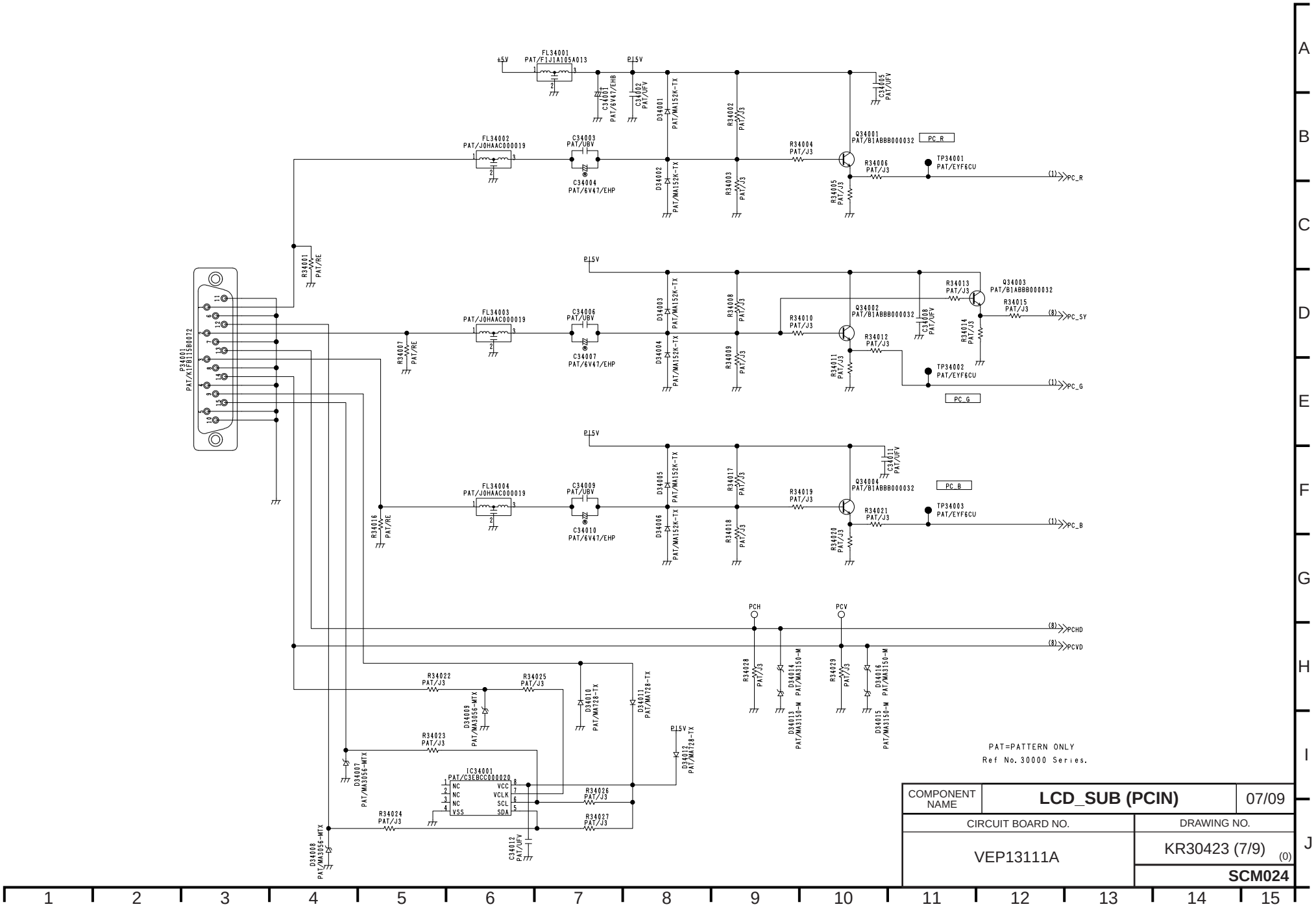
COMPONENT NAME	**LCD_SUB (YC_SEP)**	04/09
CIRCUIT BOARD NO.	DRAWING NO.	
VEP13111A	KR30423 (4/9) (0)	
	SCM021	

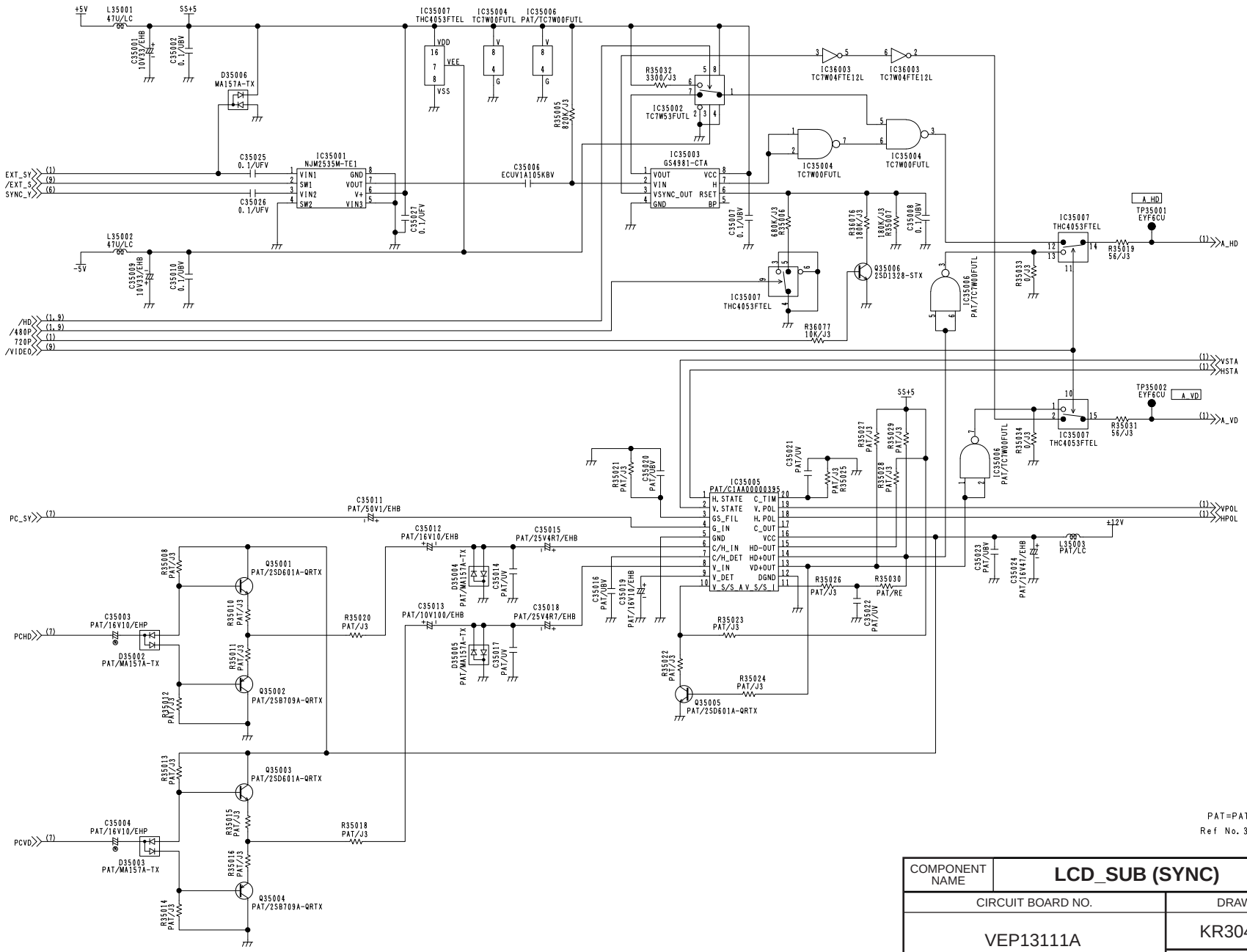


COMPONENT NAME	LCD_SUB (C_DEC)	05/09
CIRCUIT BOARD NO.		DRAWING NO.
VEP13111A		KR30423 (5/9) (0)
		SCM022



COMPONENT NAME	LCD_SUB (AD_LPF)	06/09
CIRCUIT BOARD NO.		DRAWING NO.
VEP13111A		KR30423 (6/9) (0)
		SCM023


PAT=PATTERN ONLY
Ref No. 30000 Series.
COMPONENT NAME
LCD_SUB (PCIN)
07/09
CIRCUIT BOARD NO.
VEP13111A
DRAWING NO.
KR30423 (7/9) (0)
SCM024

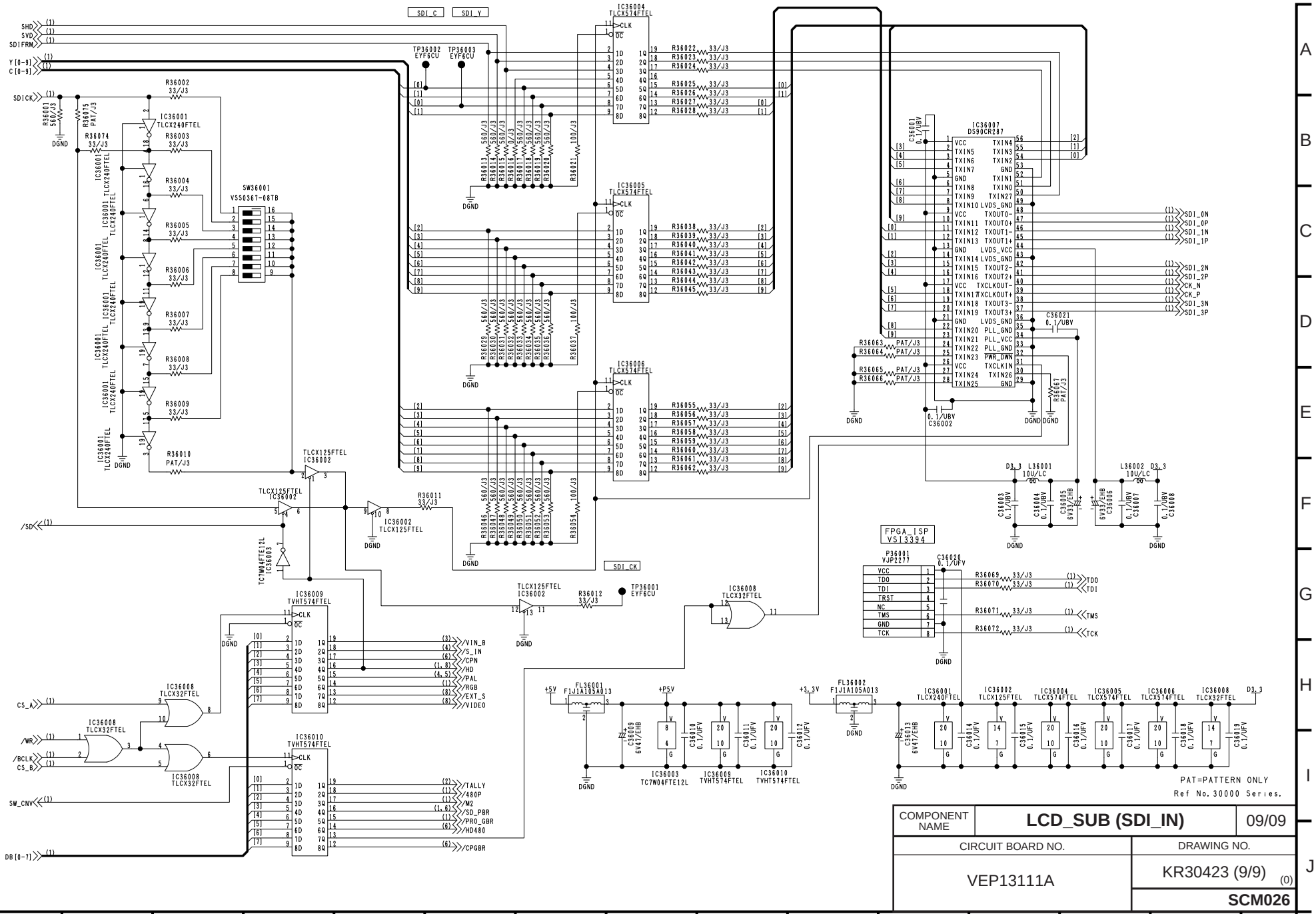


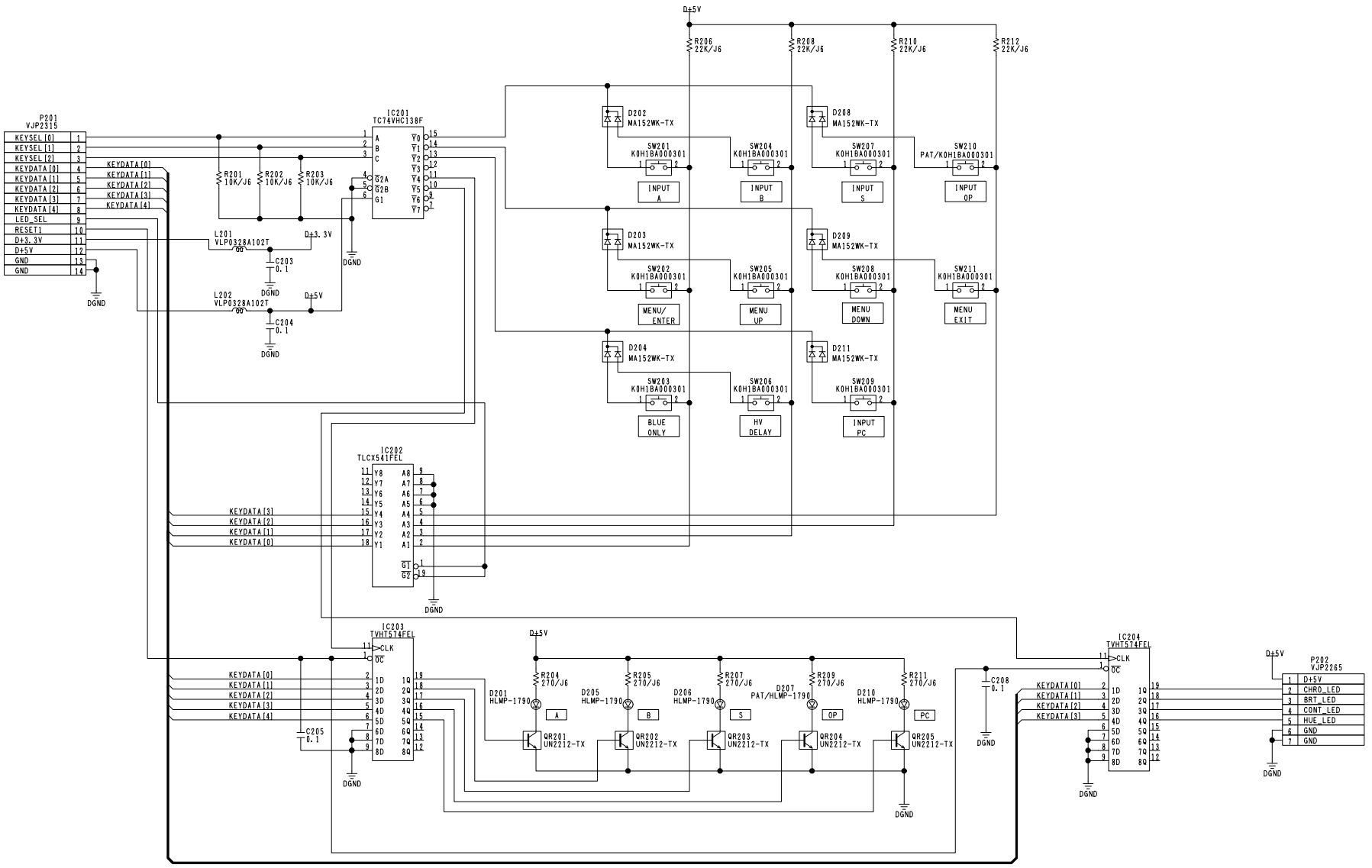
PAT=PATTERN ONLY
Ref No. 30000 Series.

COMPONENT NAME	**LCD_SUB (SYNC)**	08/09
CIRCUIT BOARD NO.	DRAWING NO.	
VEP13111A	KR30423 (8/9) (0)	
	SCM025	

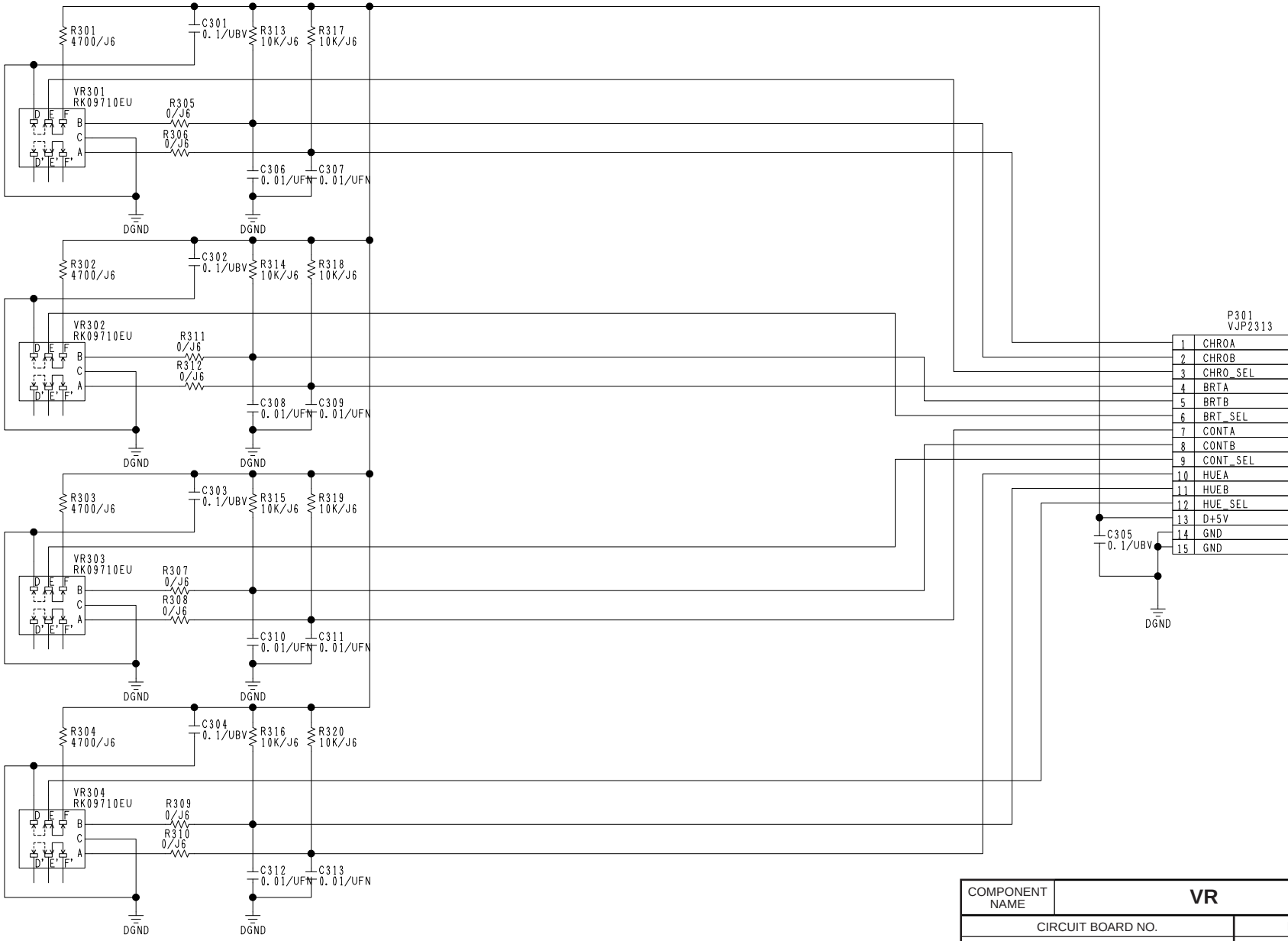
A B C D E F G H I J

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

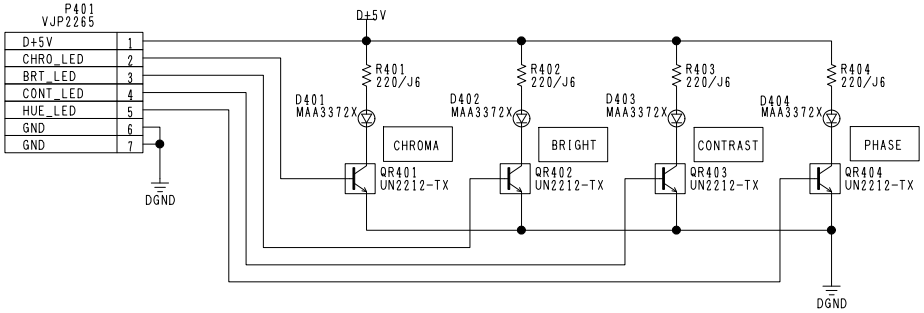

SDI_C
SDI_Y
SHD
SVD
SDIFRM
Y [0-9]
C [0-9]
SDICK
IC36004 TLCX574FTEL
IC36005 TLCX574FTEL
IC36006 TLCX574FTEL
IC36007 DS90CR287
IC36001 TLCX240FTEL
IC36002 TLCX125FTEL
IC36003 TC7W04FTE12L
IC36008 TLCX32FTEL
IC36009 TVHT574FTEL
IC36010 TVHT574FTEL
SW36001 VSS0367-08TB
TP36002 EYF6CU
TP36003 EYF6CU
TP36001 EYF6CU
SDI_CK
/SD
CS_A
/WR
/BCLK
CS_B
SW_CNV
DB [0-7]
VIN_B
S_IN
CPN
HD
PAL
RGB
EXT_S
VIDEO
TALLY
480P
M2
SD_PBR
PRO_GBR
HD480
CPGBR
SDI_0N
SDI_0P
SDI_1N
SDI_1P
SDI_2N
SDI_2P
CK_N
CK_P
SDI_3N
SDI_3P
FPGA_ISP
VSI3394
P36001 VJP2277
VCC
TDO
TDI
TRST
NC
TMS
GND
TCK
+5V
+P5V
+3.3V
FL36001 F1J1A105A013
FL36002 F1J1A105A013
DGND
PAT=PATTERN ONLY
Ref No. 30000 Series.
COMPONENT NAME
LCD_SUB (SDI_IN)
09/09
CIRCUIT BOARD NO.
VEP13111A
DRAWING NO.
KR30423 (9/9) (0)
SCM026



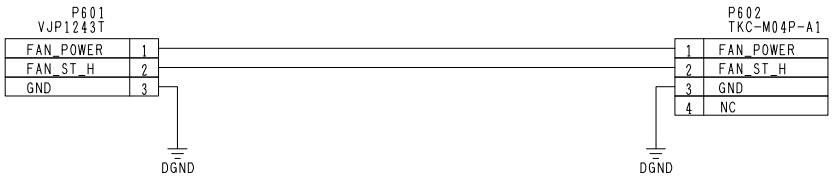
COMPONENT NAME	**FRONT**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP10106A		KR0T08 (1/1) (0)
		SCM027



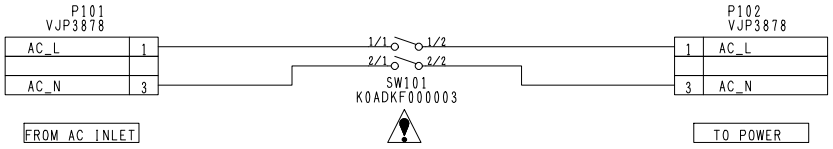
COMPONENT NAME	**VR**	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP10107A		KR0T09 (1/1) (0)
		SCM028



COMPONENT NAME	LED	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP10108A	KR0T10 (1/1) (0)	
	SCM029	



COMPONENT NAME	FAN CONNECT	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP10110A	KR***** (1/1) (0)	
	SCM029	

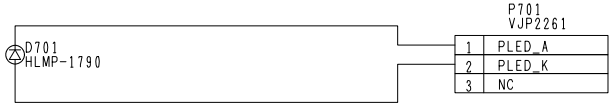


警 告

⚠ 印の部品は安全上重要な部品です。
交換するときは、安全上および性能維持のため
必ず指定の部品をご使用ください。

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

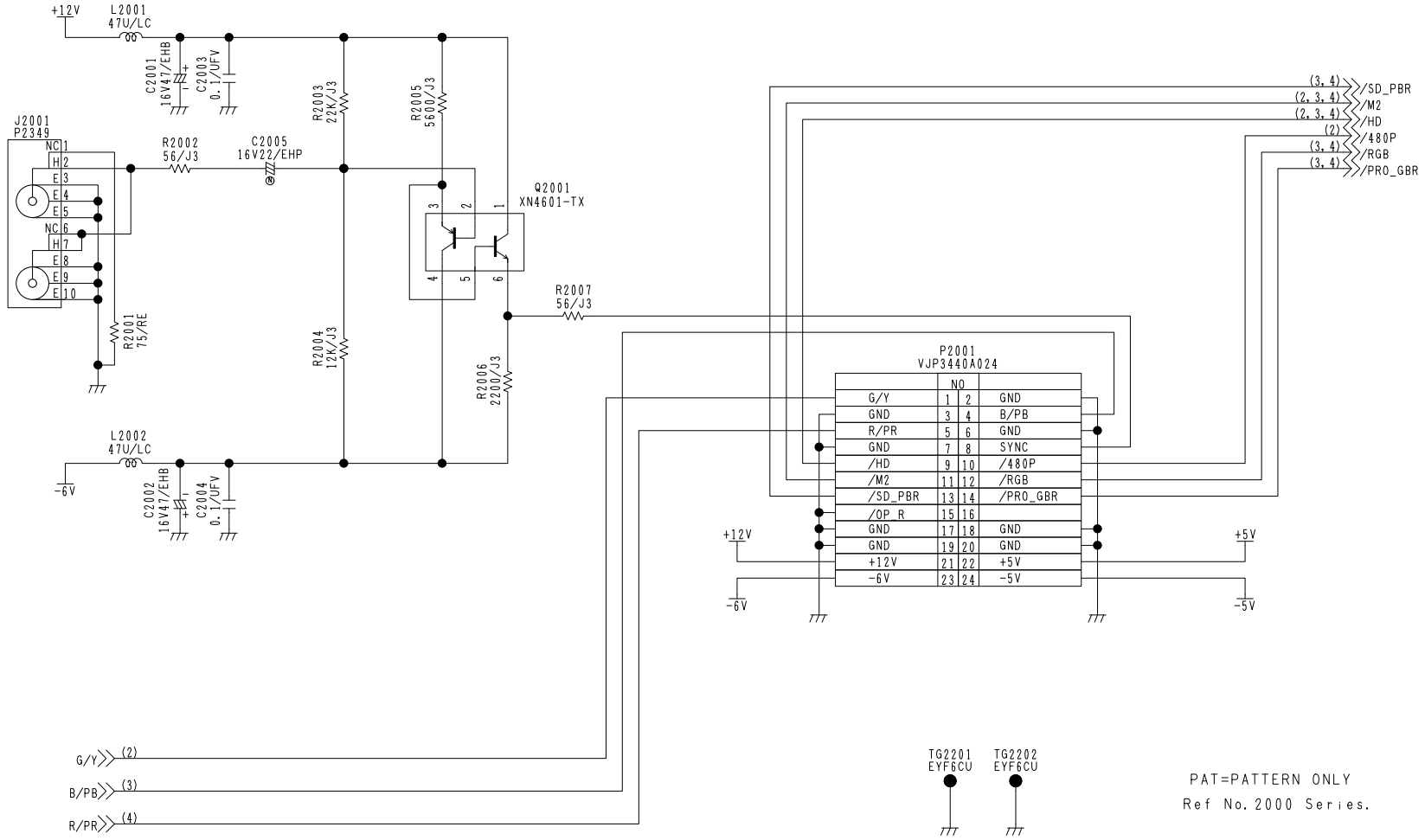
COMPONENT NAME	AC SW	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP11103A	KR1G26 (1/1) (0)	
	SCM029	



COMPONENT NAME	POWER LED	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP10111A	KR0T11 (1/1) (0)	
	SCM029	

A B C D E F G H I J

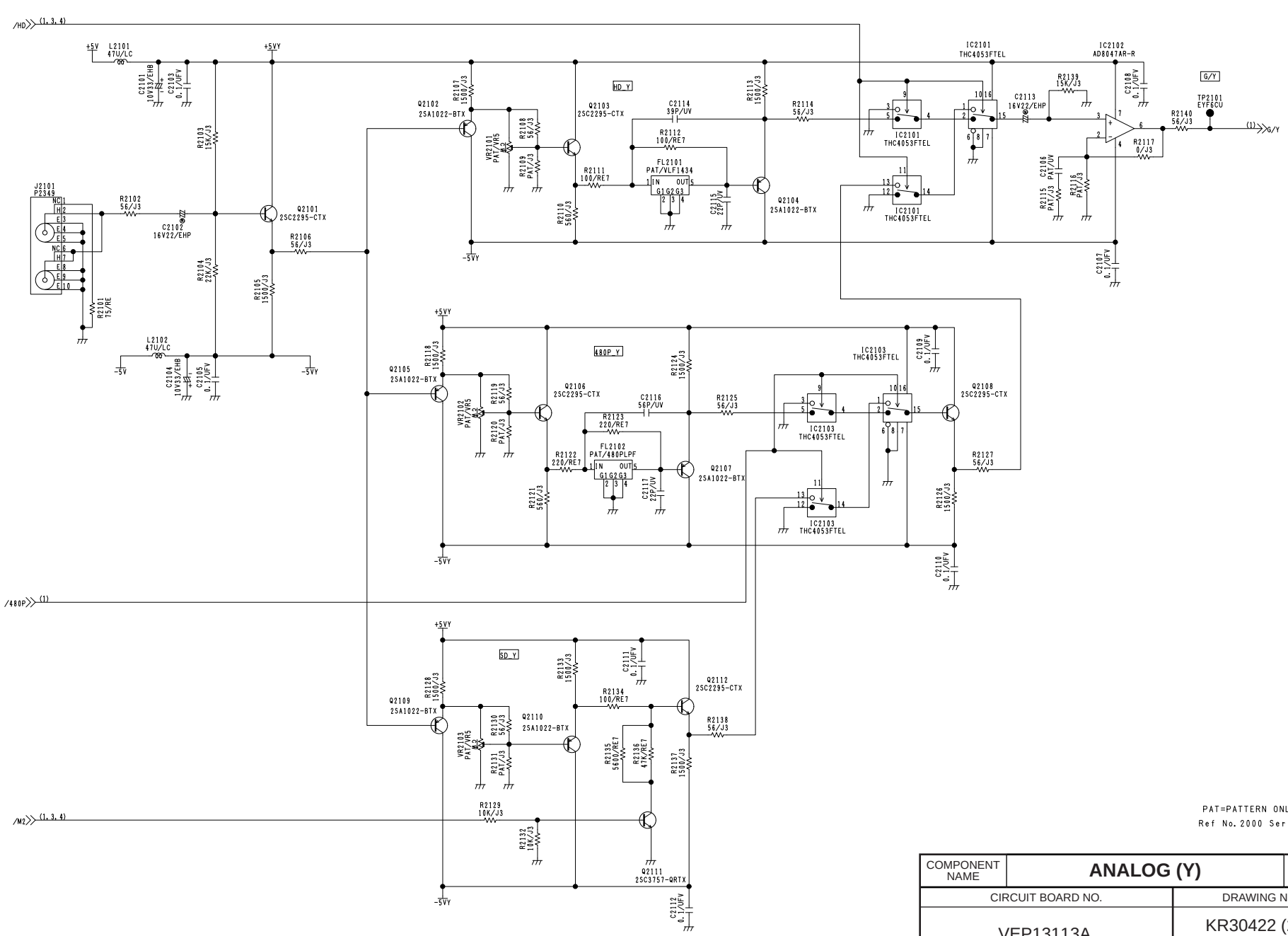
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



PAT=PATTERN ONLY

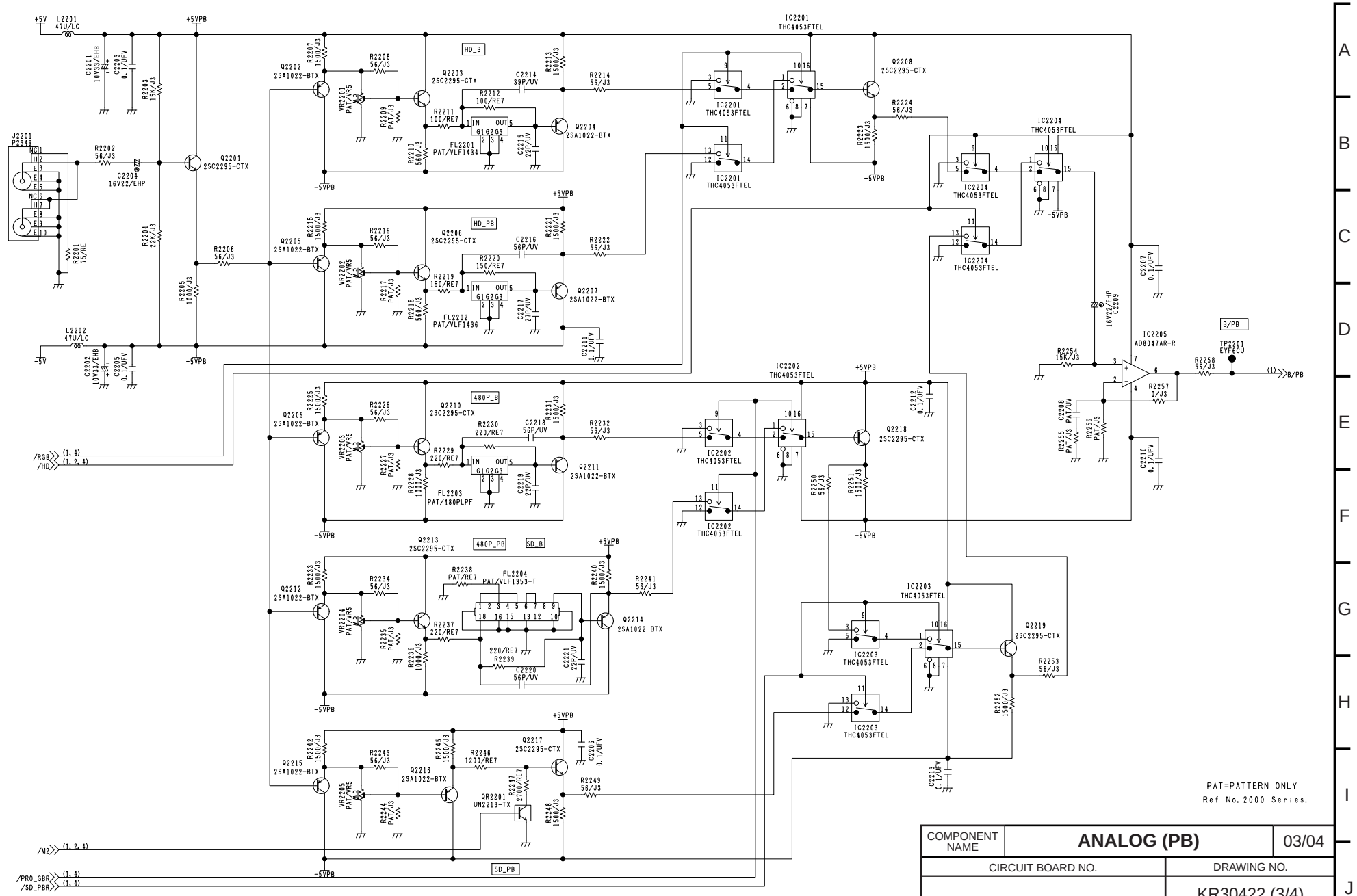
Ref No. 2000 Series.

COMPONENT NAME	ANALOG (I/O)	01/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP13113A		KR30422 (1/4) (0)
		SCM030

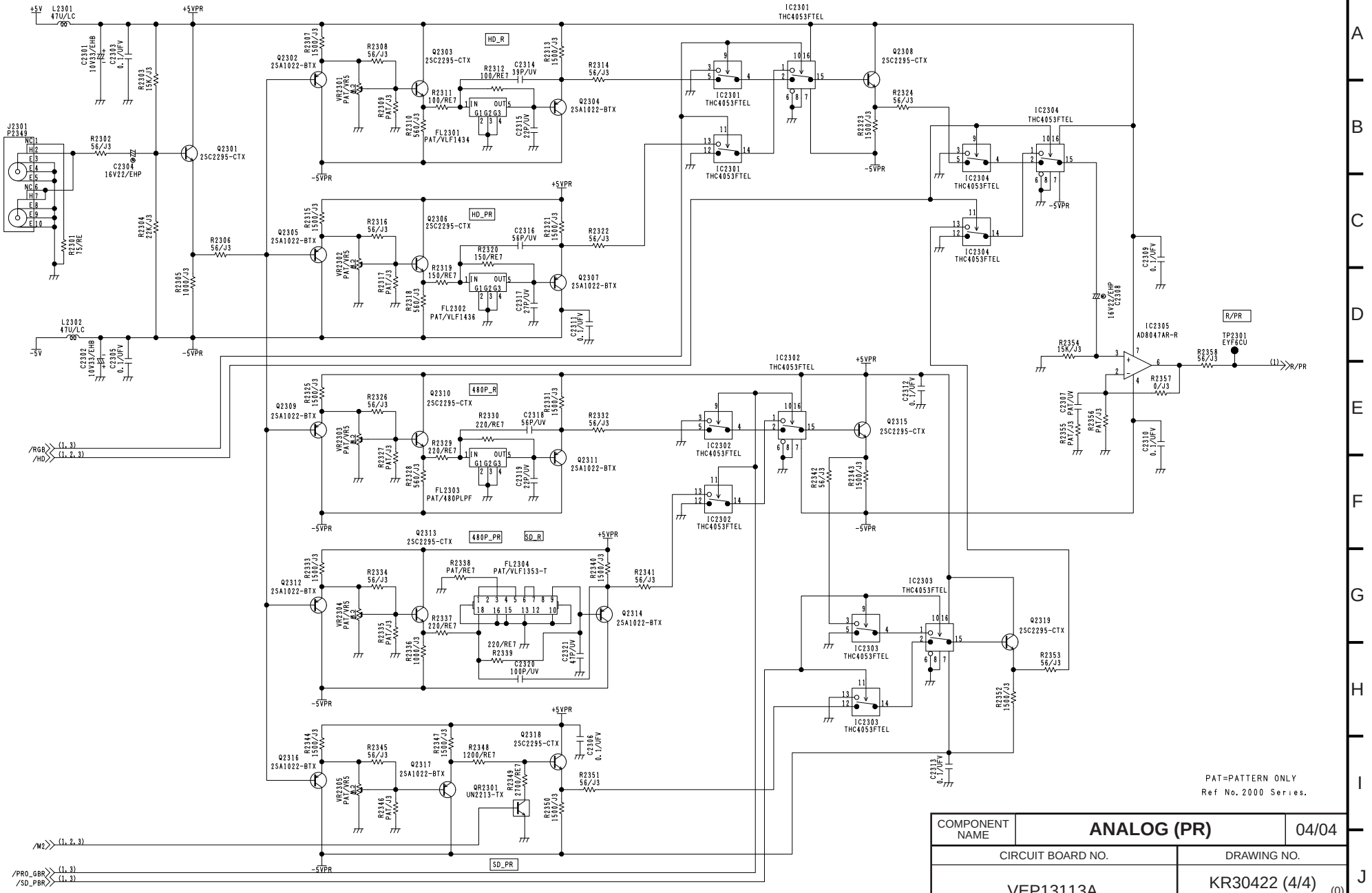


PAT=PATTERN ONLY
Ref No. 2000 Series.

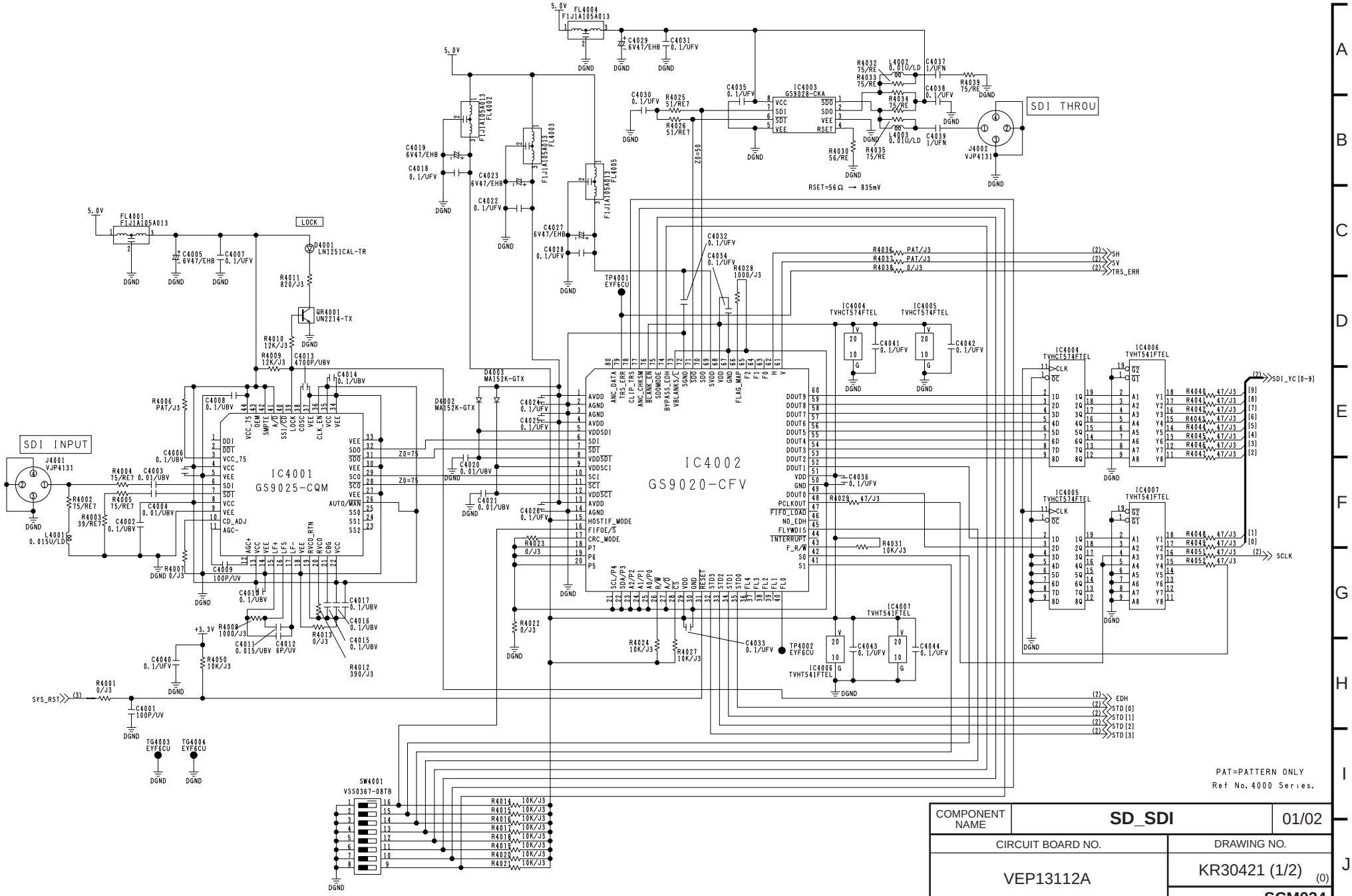
COMPONENT NAME	ANALOG (Y)	02/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP13113A		KR30422 (2/4) (0)
		SCM031



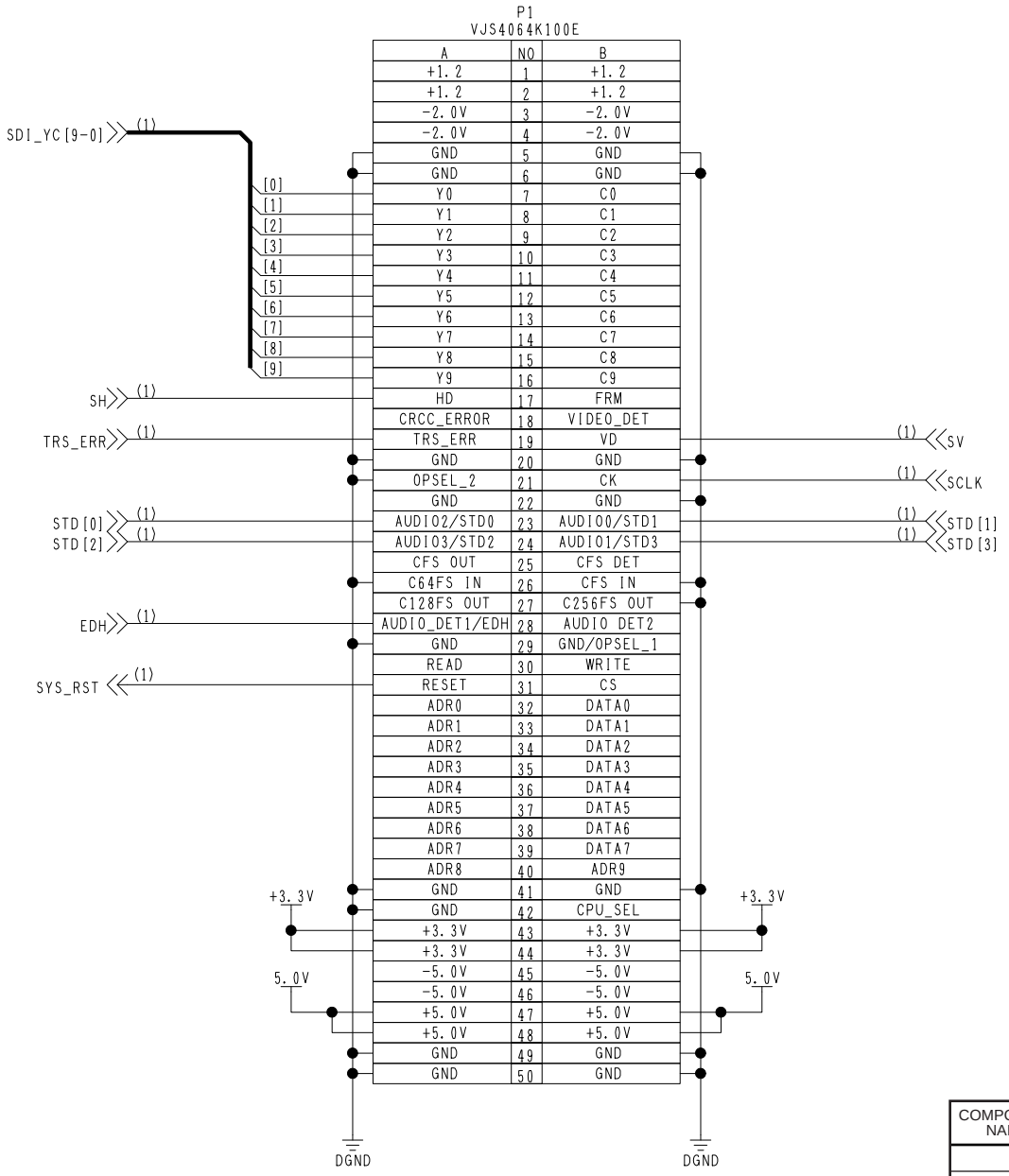
COMPONENT NAME	ANALOG (PB)	03/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP13113A		KR30422 (3/4) (0)
		SCM032



COMPONENT NAME	**ANALOG (PR)**	04/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP13113A		KR30422 (4/4) (0)
		SCM033

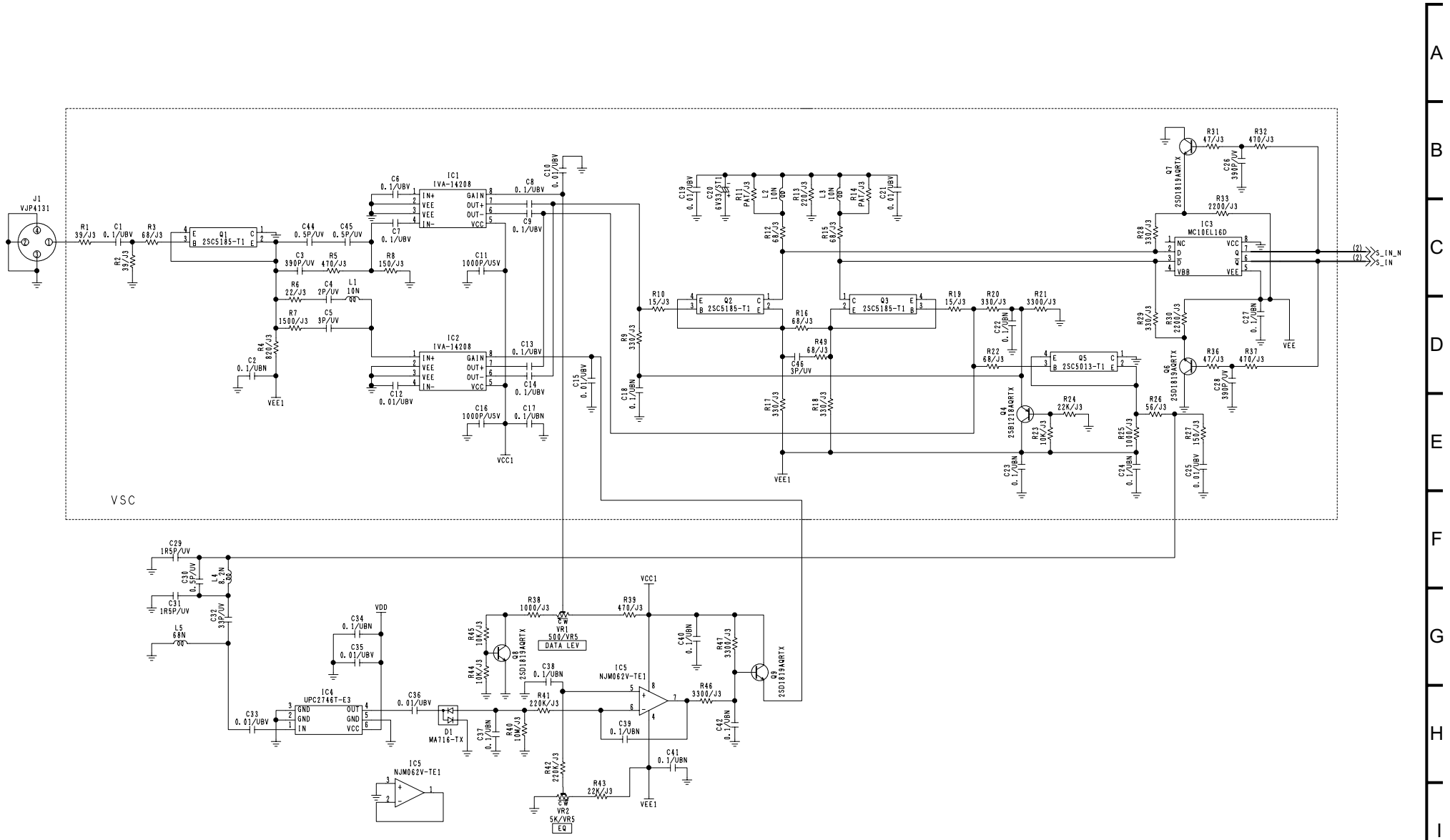


COMPONENT NAME	SD_SDI	01/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP13112A		KR30421 (1/2) (0)
		SCM034

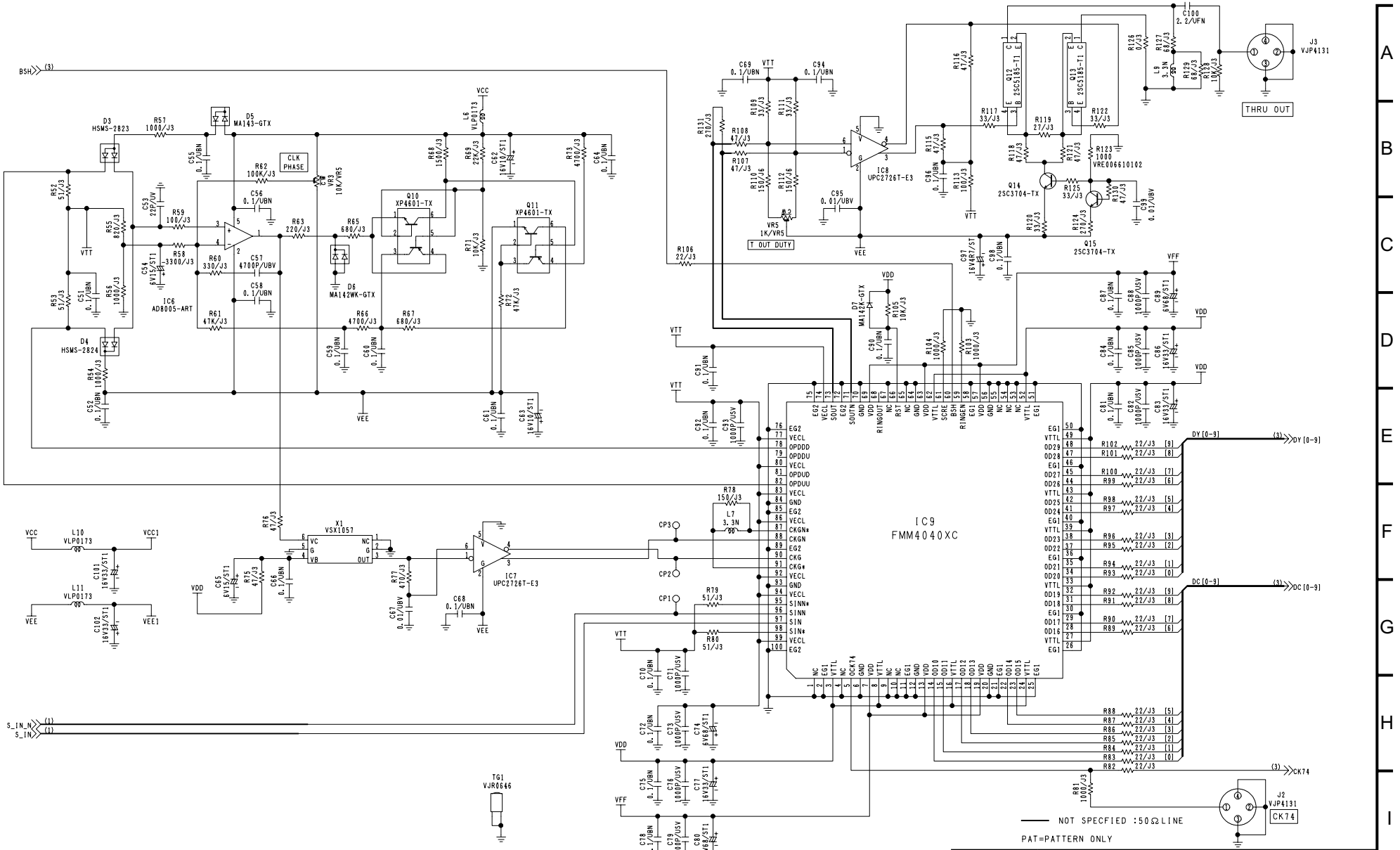


PAT=PATTERN ONLY
Ref No. 4000 Series.

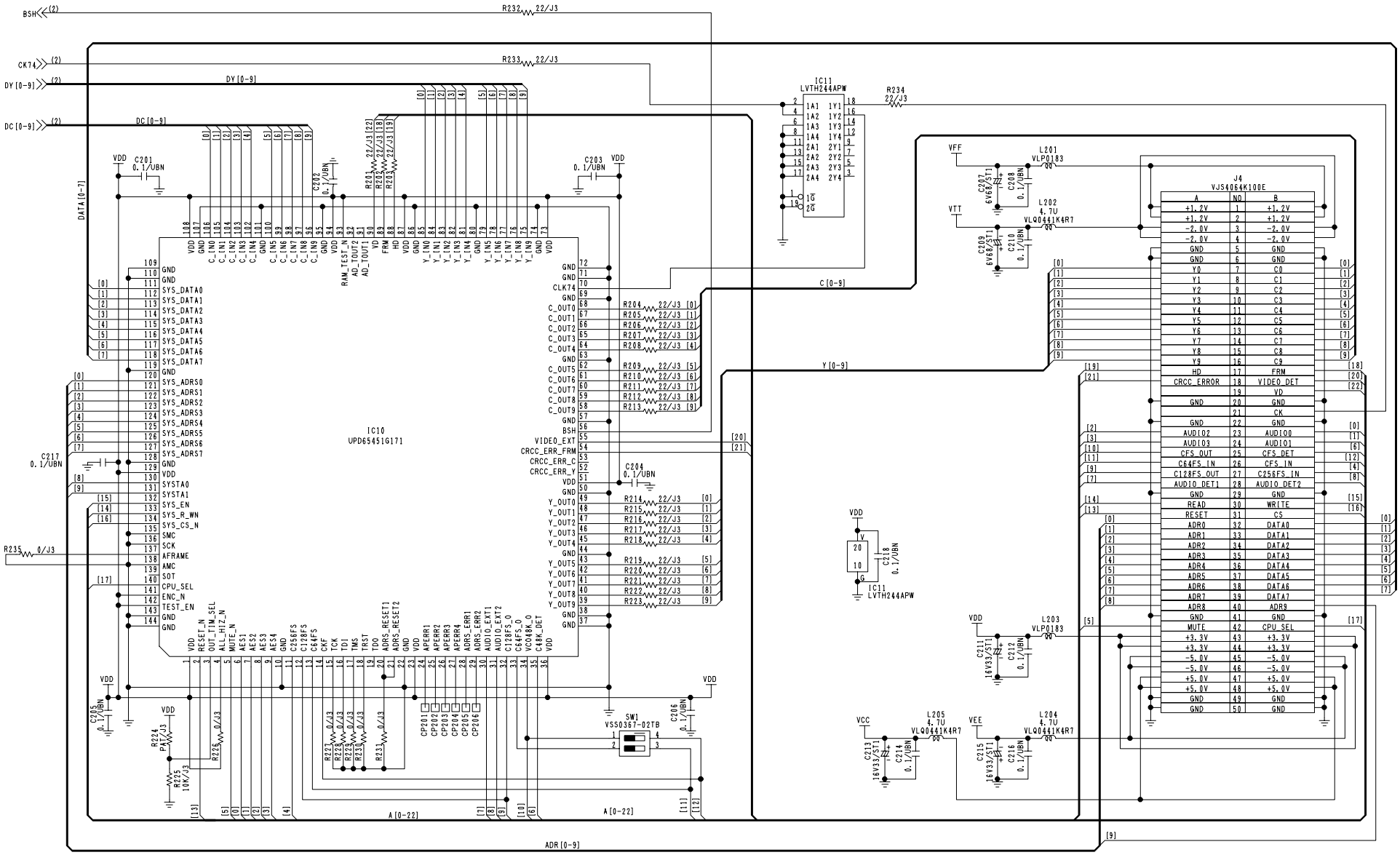
COMPONENT NAME	SD_SDI	02/02
CIRCUIT BOARD NO.		DRAWING NO.
VEP13112A		KR30421 (2/2) (0)
		SCM035



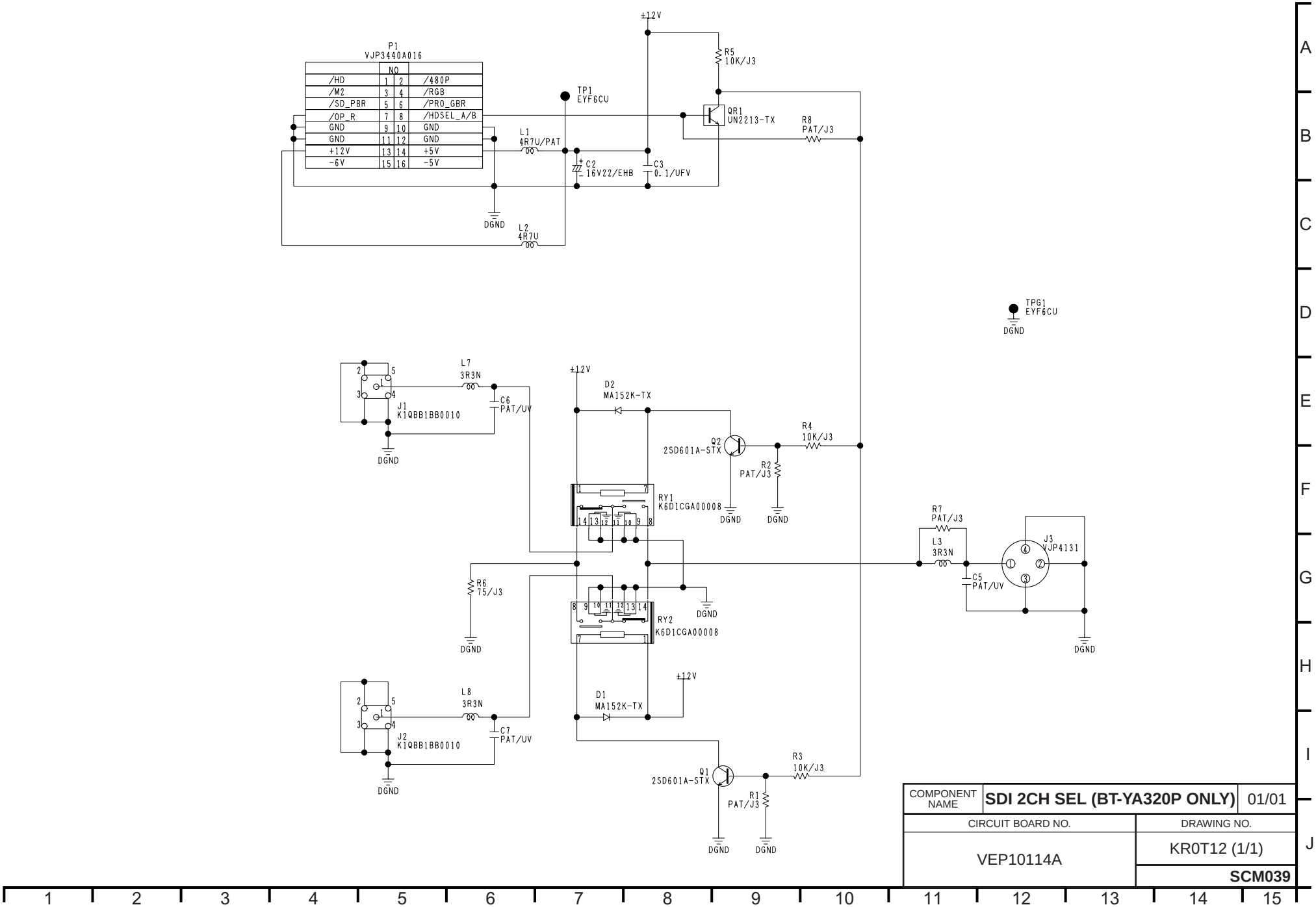
COMPONENT NAME	**HD SDI RX (EQ)**	01/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83459B	KR3X19 (1/3) (1)	
	SCM036	



COMPONENT NAME	**HD SDI RX (CKR, S/P)**	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP83459B		KR3X19 (2/3) (1)
		SCM037



COMPONENT NAME	**HD SDI RX (DEC)**	03/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP83459B		KR3X19 (3/3) (1)
		SCM038



COMPONENT NAME	**SDI 2CH SEL (BT-YA320P ONLY)**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP10114A	KR0T12 (1/1)	
	SCM039	

SECTION 6

CIRCUIT BOARD DIAGRAMS

NOTE:
BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST, SECTION7

CAUTION

THE ▭ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

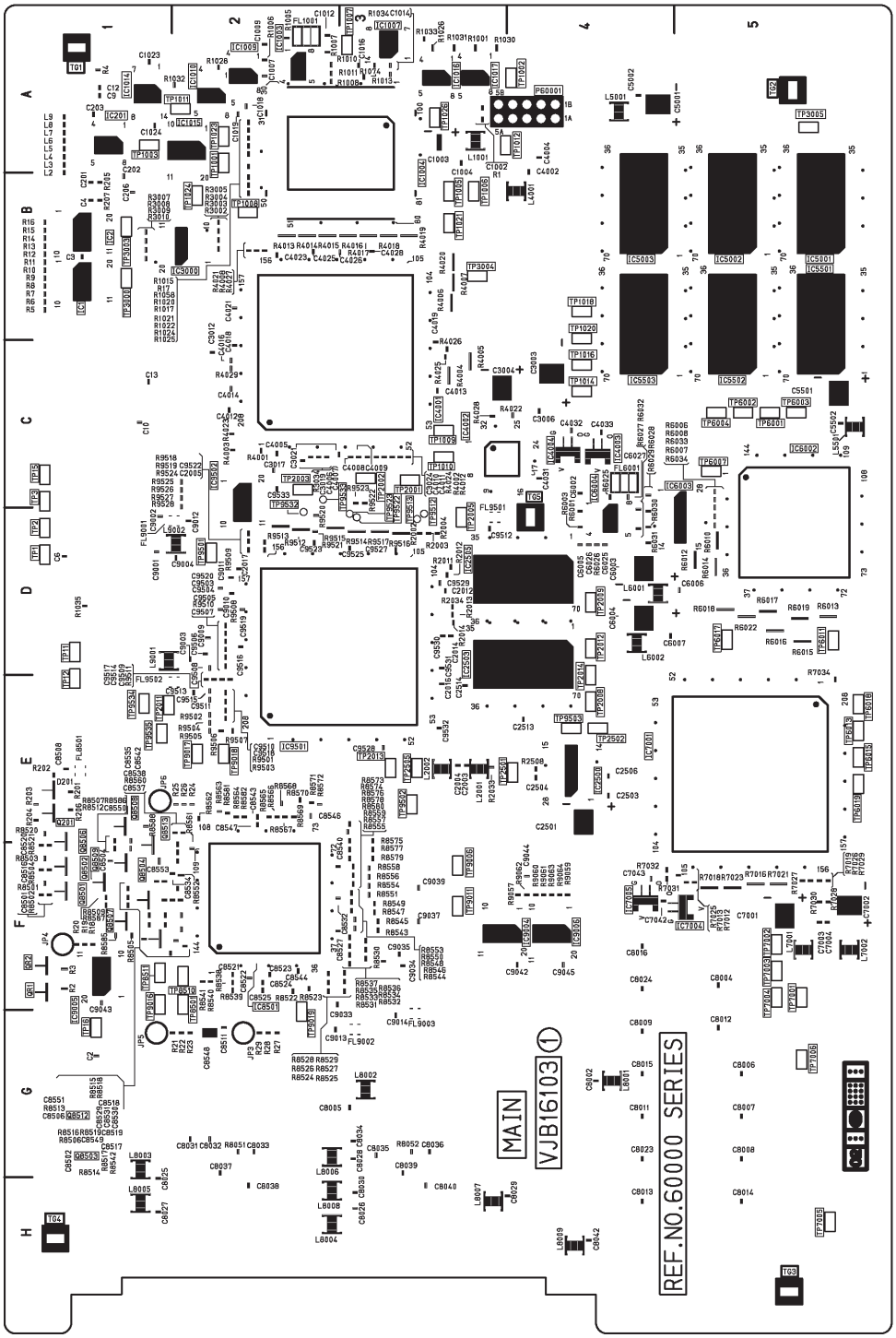
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CONTENTS

MAIN P.C.BOARD (VEP16103A/B) CBA-1
SUB P.C.BOARD (VEP13111A) CBA-3
FRONT P.C.BOARD (VEP10106A) CBA-5
VR P.C.BOARD (VEP10107A) CBA-5
LED P.C.BOARD (VEP10108A) CBA-6
POWER LED P.C.BOARD (VEP10111A) CBA-6
AC SW P.C.BOARD (VEP11103A) CBA-6
DC-DC MAIN P.C.BOARD (VEP11108A) CBA-7
DC-DC SUB P.C.BOARD (VEP11109A) CBA-8
POWER MAIN P.C.BOARD (VEP11104A) CBA-9
POWER SUB1 P.C.BOARD (VEP11105A) CBA-10
POWER SUB2 P.C.BOARD (VEP11106A) CBA-10
BT-YA100P ANALOG P.C.BOARD (VEP13113A) CBA-11
BT-YA200P SD-SDI P.C.BOARD (VEP13112A) CBA-12
BT-YA300P HD-SDI P.C.BOARD (VEP83459B) CBA-13

MAIN P.C. BOARD (VEP16103A/B)

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC6400	C4	IC61015	A2	IC65503	B4	Q68501	F1	TP6000	C1	TP6101	C3	TP6200	C2	TP6300	B3	TP6700	F5
IC6400	C4	IC61016	A3	IC66002	D5	Q68502	F1	TP6001	D1	TP6101	A2	TP6200	D3	TP6300	A5	TP6700	F5
IC6700	F5	IC61017	A3	IC66003	D5	Q68506	F1	TP6001	E1	TP6101	A3	TP6200	E4	TP6600	C5	TP6700	F5
IC6700	F4	IC62500	E4	IC66004	D4	Q68513	F1	TP6001	C1	TP6101	C4	TP6200	D4	TP6600	C5	TP6700	F5
IC60001	B1	IC62503	D4	IC67001	E5	QR6000	F1	TP6001	G1	TP6101	C4	TP6201	E1	TP6600	C5	TP6700	H5
IC60002	B1	IC62505	D4	IC68501	F2	QR6000	F1	TP6100	A2	TP6101	B4	TP6201	D4	TP6600	C5	TP6700	G5
IC60201	A1	IC63000	B2	IC69004	F3	TG6000	A1	TP6100	A4	TP6102	B4	TP6201	E3	TP6600	C5	TP6850	F2
IC61003	A2	IC64002	C3	IC69005	F1	TG6000	A5	TP6100	A1	TP6102	B3	TP6201	E4	TP6601	D5	TP6851	F2
IC61004	A3	IC65001	B5	IC69006	F4	TG6000	H5	TP6100	B3	TP6102	A2	TP6250	E4	TP6601	E5	TP6851	F1
IC61007	A3	IC65002	B5	IC69501	D2	TG6000	H1	TP6100	B3	TP6102	B2	TP6250	E4	TP6601	E5	TP6900	F3
IC61009	A2	IC65003	B4	IC69502	C2	TG6000	D4	TP6100	A3	TP6102	A3	TP6250	E3	TP6601	D5	TP6901	F3
IC61010	A2	IC65501	B5	JP60001	A5	TP6000	D1	TP6100	B2	TP6200	C3	TP6300	B1	TP6601	E5	TP6901	F1
IC61014	A1	IC65502	B5	Q60201	E1	TP6000	D1	TP6100	C3	TP6200	C3	TP6300	B1	TP6601	E5	TP6901	E2



(FOIL SIDE)

MAIN P.C. BOARD (VEP16103A/B)

REF	LOC
IC6200	E3
IC6200	E3
IC6300	C4
IC6300	C4
IC6300	C4
IC6600	D5
IC6600	D4
IC6700	F5
IC6700	F5
IC6850	G2
IC6900	F4
IC6900	F4
IC61002	A3
IC61006	B2

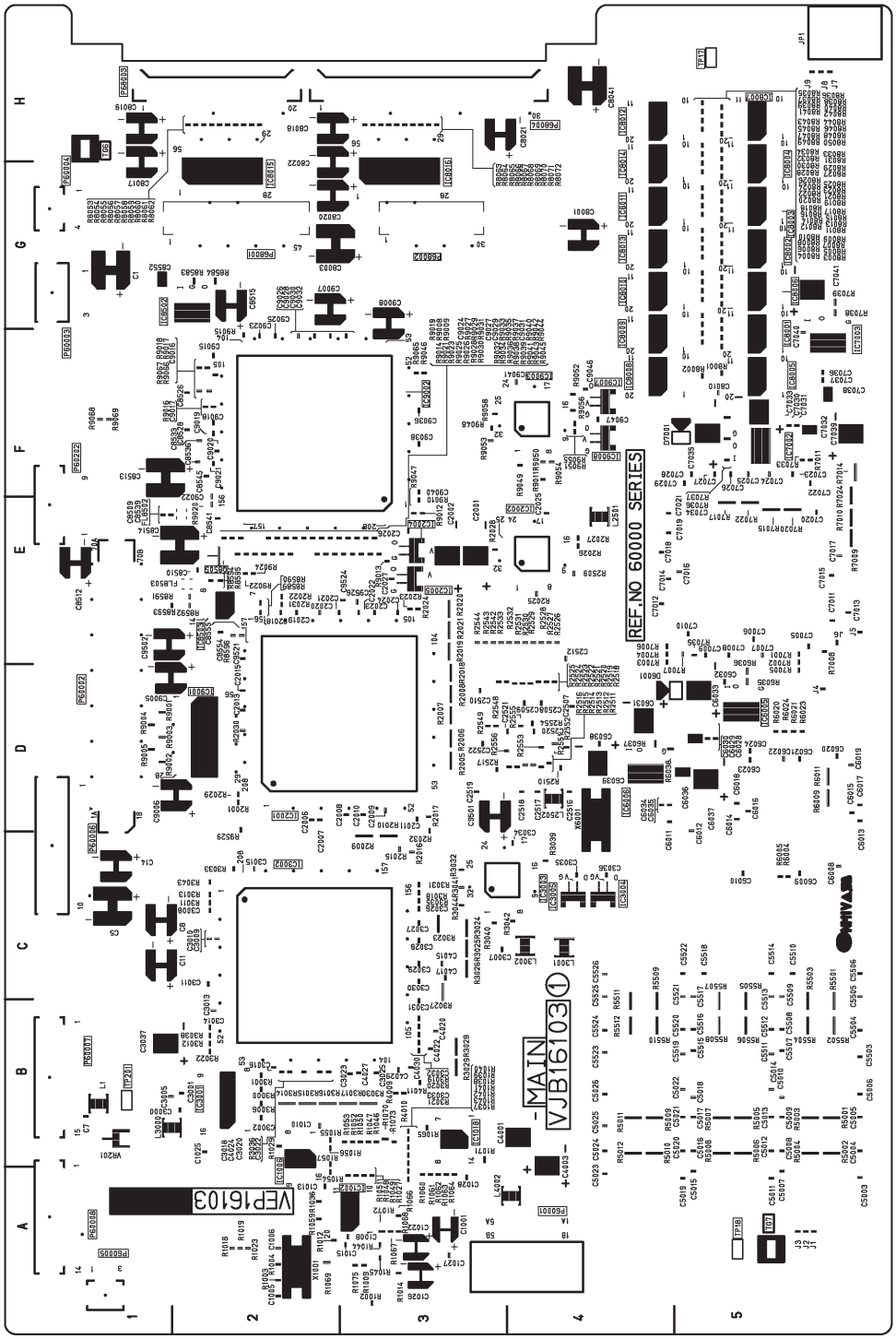
REF	LOC
IC61018	B3
IC62001	D3
IC62002	E4
IC68010	G4
IC63001	B2
IC63002	C2
IC63003	C4
IC68001	F5
IC68002	G5
IC68003	G5
IC68004	H5
IC68005	F5
IC68006	G5
IC68007	H5

REF	LOC
IC68008	F4
IC68009	F4
IC68010	G4
IC68011	G4
IC68012	H4
IC68013	G4
IC68014	H4
IC68015	G2
IC68016	G3
IC68503	E2
IC69001	D2
IC69002	F2
IC69003	F4

REF	LOC
J60001	A5
J60002	A5
J60003	A5
J60004	D5
J60005	E5
J60006	E5
J60007	H5
J60008	H5
J60009	H5
P60001	A4
P60002	D1
P60003	G1
P60004	G1

REF	LOC
P60005	A1
P60006	C1
P60007	B1
P60008	A1
P60202	E1
P68003	H2
P68004	H3
Q68505	E2
TG6000	H1
TG6000	A5
TP6001	H5
TP6001	A5
TP6020	B1

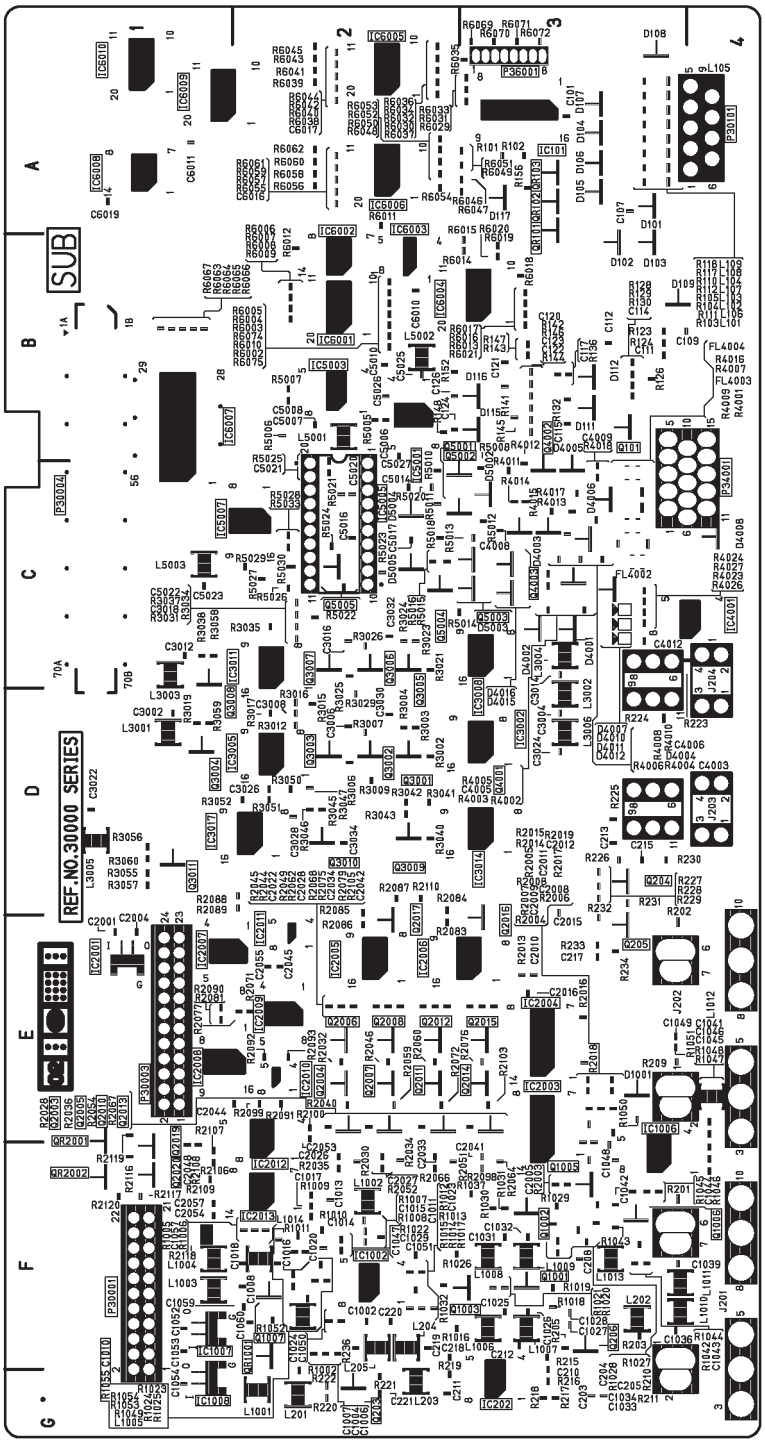
REF	LOC
VR6020	B1
X61001	A2
X66001	D4



(COMPONENT SIDE)

SUB P.C. BOARD (VEP13111A)

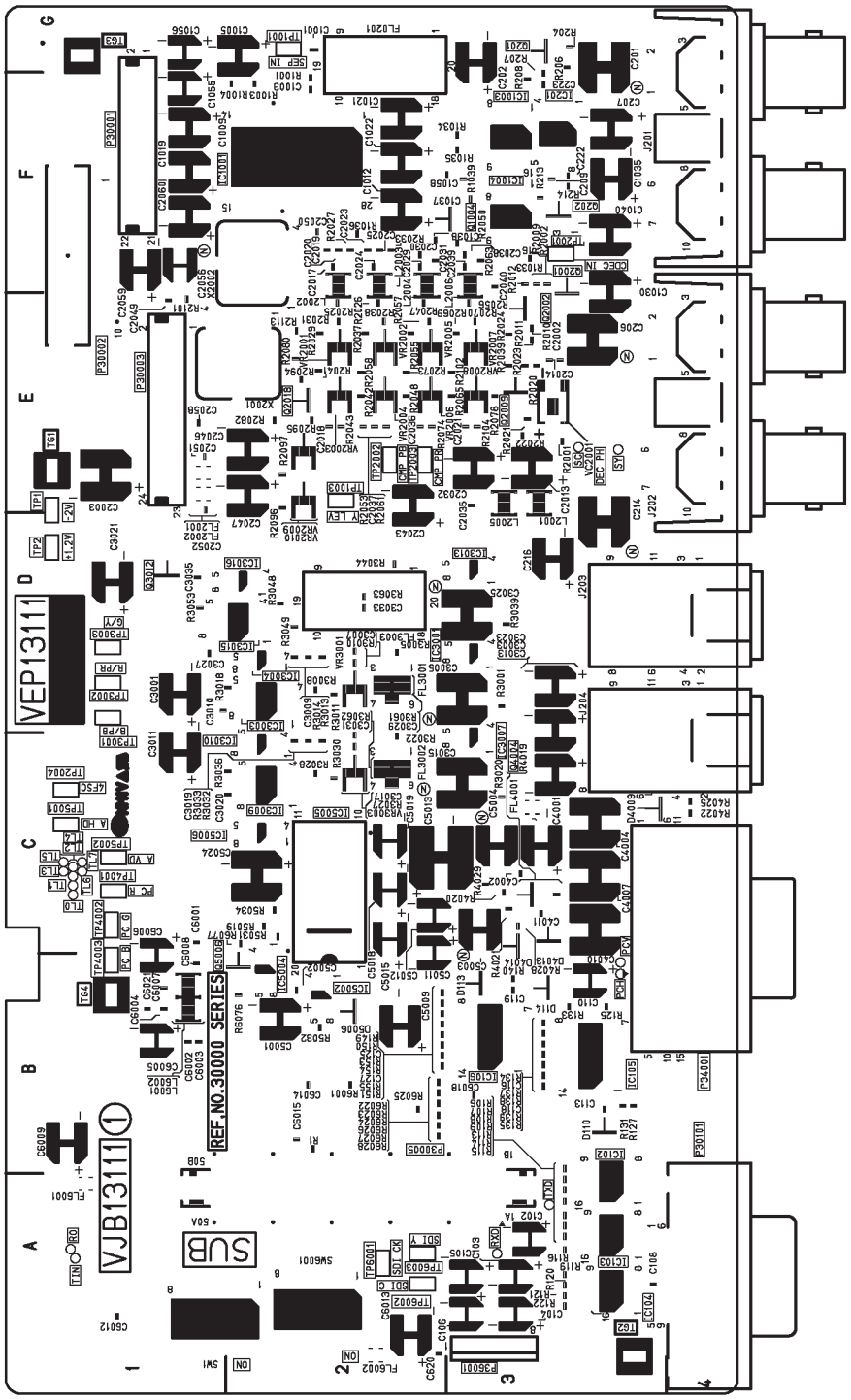
REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC3100	F1	IC32009	E2	IC35007	C2	L30103	A3	Q32004	E2	Q32019	F1	QR3010	B3
IC3100	G1	IC32010	E2	IC36001	B2	P30004	C1	Q32005	E2	Q32020	F1	QR3010	A3
IC3200	E1	IC32011	E2	IC36002	B2	Q30101	B3	Q32006	E2	Q33001	D2	QR3010	A3
IC30101	A3	IC32012	E2	IC36003	B2	Q30203	G2	Q32007	E2	Q33002	D2	QR3100	F2
IC30202	G3	IC32013	F2	IC36004	B3	Q30204	D3	Q32008	E2	Q33003	D2	QR3200	E1
IC31002	F2	IC33002	D3	IC36005	A2	Q30205	E3	Q32010	E2	Q33004	D1	QR3200	F1
IC31006	F3	IC33005	D2	IC36006	A2	Q30206	F3	Q32011	E2	Q33005	C2		
IC32003	E3	IC33008	C3	IC36007	B1	Q31001	F3	Q32012	E2	Q33006	C2		
IC32004	E3	IC33011	C2	IC36008	A1	Q31002	F3	Q32013	E3	Q33007	C2		
IC32005	E2	IC33014	D3	IC36009	A1	Q31003	F3	Q32014	E3	Q33008	D1		
IC32006	E3	IC33017	D2	IC36010	A1	Q31005	F3	Q32015	E3	Q33009	D2		
IC32007	E1	IC35001	B2	L30101	A3	Q31006	F3	Q32016	E3	Q33010	D2		
IC32008	E1	IC35003	B2	L30102	A3	Q32003	E2	Q32017	E2	Q33011	D1		



(FOIL SIDE)

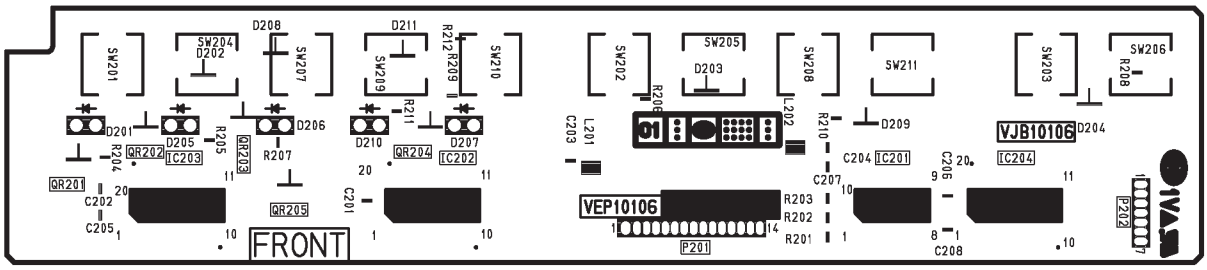
SUB P.C. BOARD (VEP13111A)

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC30102	A3	IC33013	D3	Q32001	E3	TP3000	D1	TP3600	A2
IC30103	A3	IC33016	D2	Q32002	E3	TP3100	G2	TP3600	A2
IC30104	A3	IC35002	B2	Q32009	E3	TP3100	D2	VC3200	E3
IC30105	B3	IC35004	B2	Q32018	E2	TP3200	F3	VR3200	E2
IC30106	B3	P30001	G1	Q33012	D1	TP3200	E2	X32001	E2
IC30201	F3	P30002	F1	Q35006	B2	TP3200	E2	X32002	F2
IC31001	F2	P30003	E1	SW3000	A1	TP3200	C1		
IC31003	F3	P30005	A2	SW3600	A2	TP3300	C1		
IC31004	F3	P30101	A4	TG3000	E1	TP3300	D1		
IC33001	D3	P36001	A3	TG3000	A3	TP3300	D1		
IC33004	D2	Q30201	G3	TG3000	G1	TP3500	C1		
IC33007	C3	Q30202	F3	TG3000	B1	TP3500	C1		
IC33010	C2	Q31004	F3	TP3000	D1	TP3600	A2		

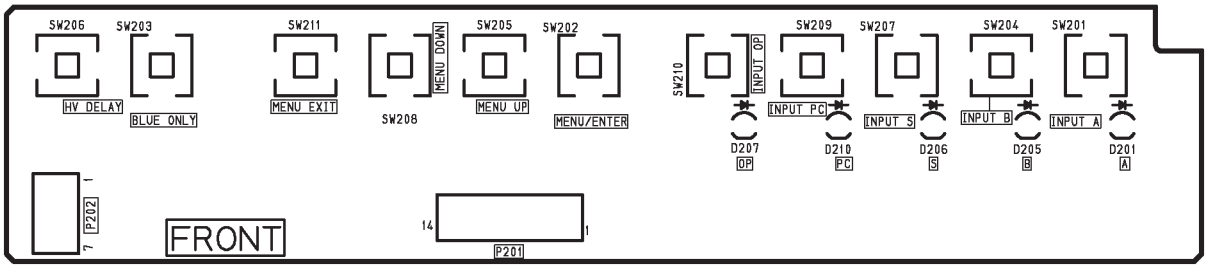


(COMPONENT SIDE)

FRONT P.C. BOARD (VEP10106A)

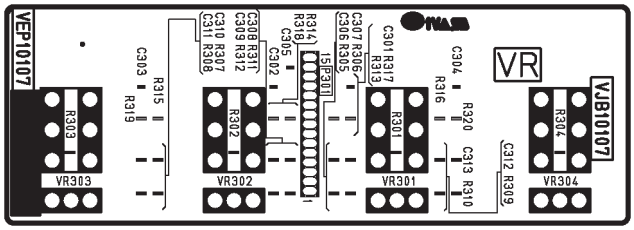


(FOIL SIDE)

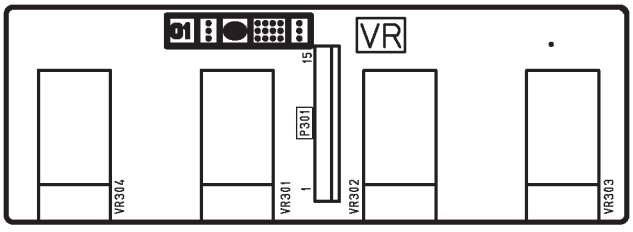


(COMPONENT SIDE)

VR P.C. BOARD (VEP10107A)

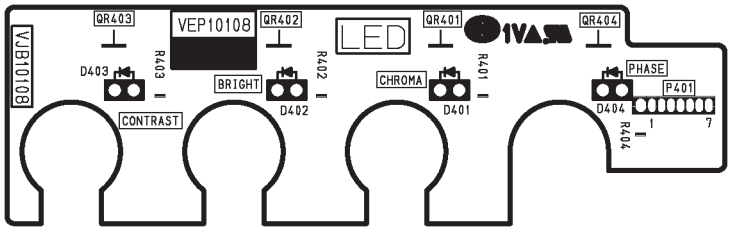


(FOIL SIDE)

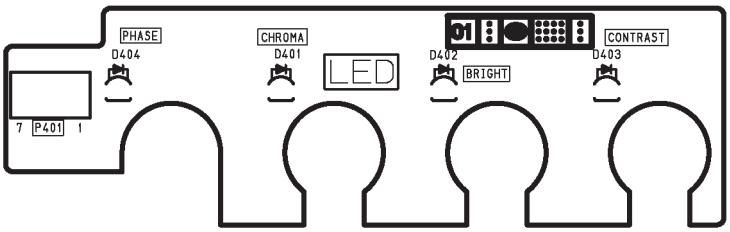


(COMPONENT SIDE)

LED P.C. BOARD (VEP10108A)

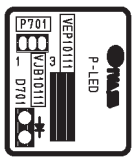


(FOIL SIDE)

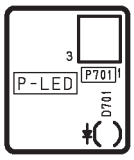


(COMPONENT SIDE)

POWER LED P.C. BOARD (VEP10111A)

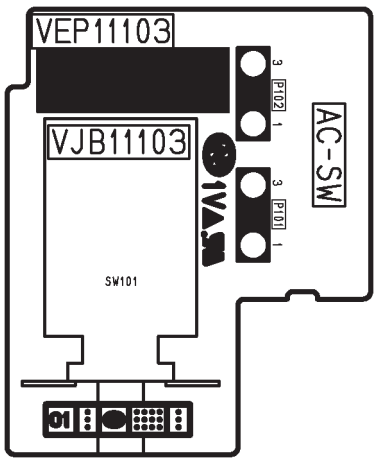


(FOIL SIDE)

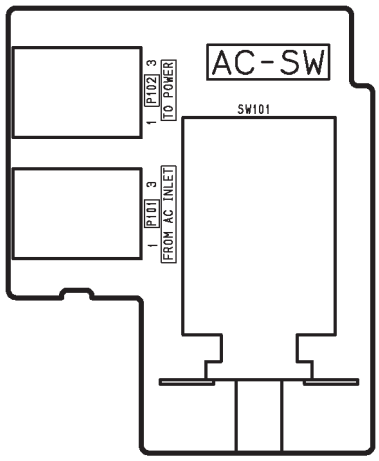


(COMPONENT SIDE)

AC SW P.C. BOARD (VEP11103A)



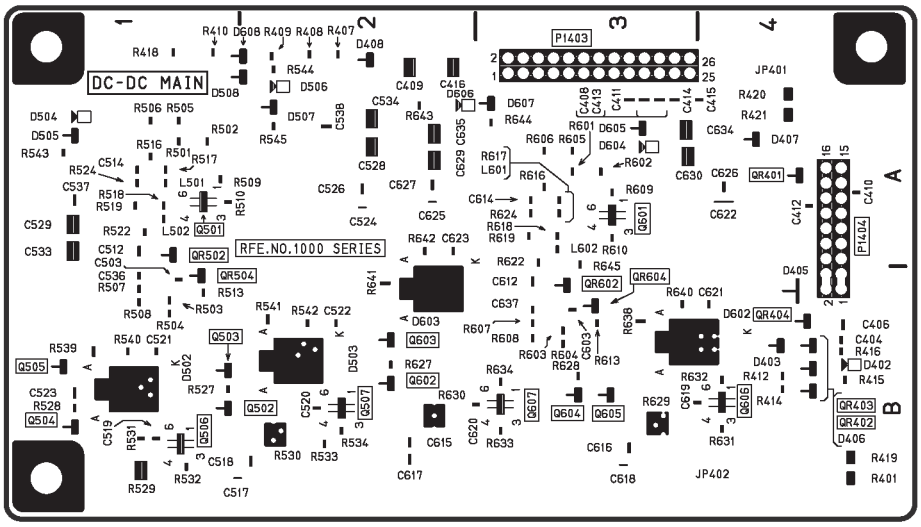
(FOIL SIDE)



(COMPONENT SIDE)

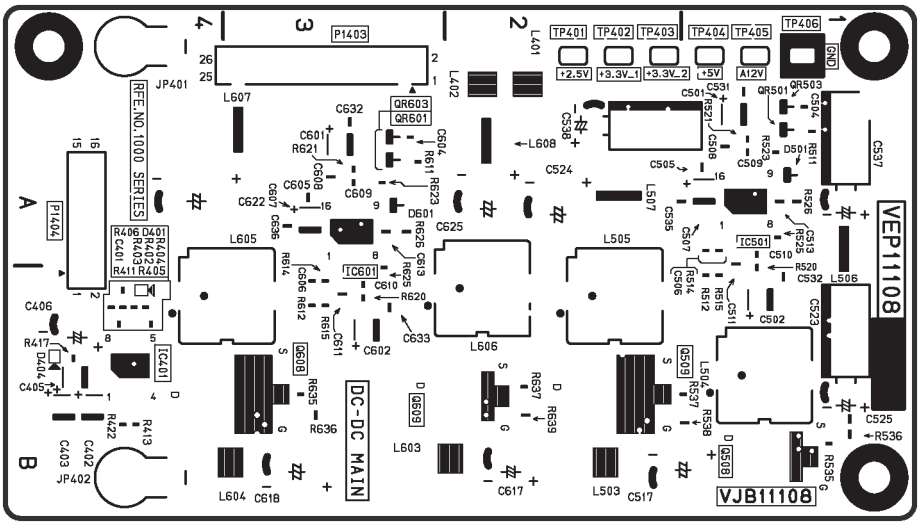
DC-DC MAIN P.C. BOARD (VEP11108A)

REF	LOC	REF	LOC
P403	A3	Q605	B3
P404	A4	Q606	B4
Q501	A1	Q607	B3
Q502	B1	QR401	A4
Q503	B1	QR402	B4
Q504	B1	QR403	B4
Q505	B1	QR404	B4
Q506	B1	QR502	A1
Q507	B2	QR504	A1
Q601	A3	QR602	B3
Q602	B2	QR604	B3
Q603	B2		
Q604	B3		



(FOIL SIDE)

REF	LOC	REF	LOC
IC401	B4	TP401	A2
IC501	A1	TP402	A2
IC601	A3	TP403	A2
P403	A3	TP404	A1
P404	A4	TP405	A1
Q508	B1	TP406	A1
Q509	B2		
Q608	B3		
Q609	B2		
QR501	A1		
QR503	A1		
QR601	A3		
QR603	A3		

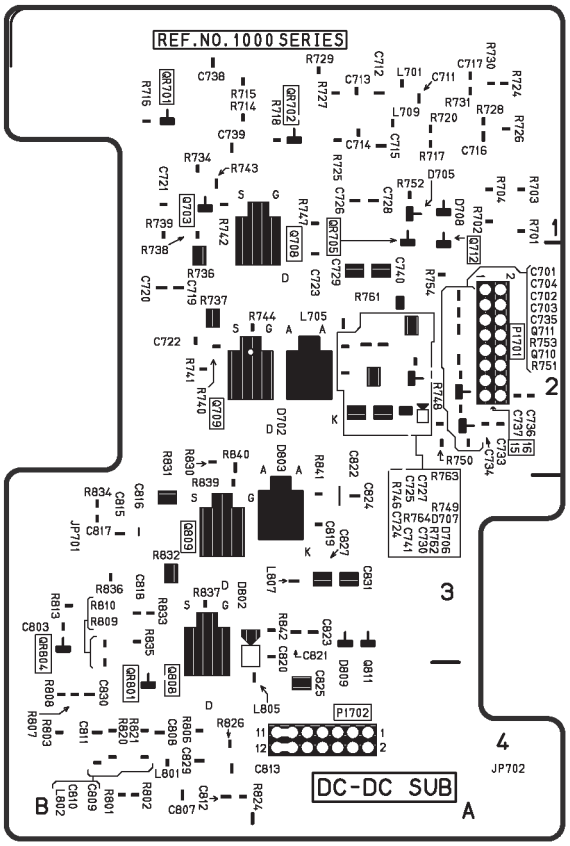


(COMPONENT SIDE)

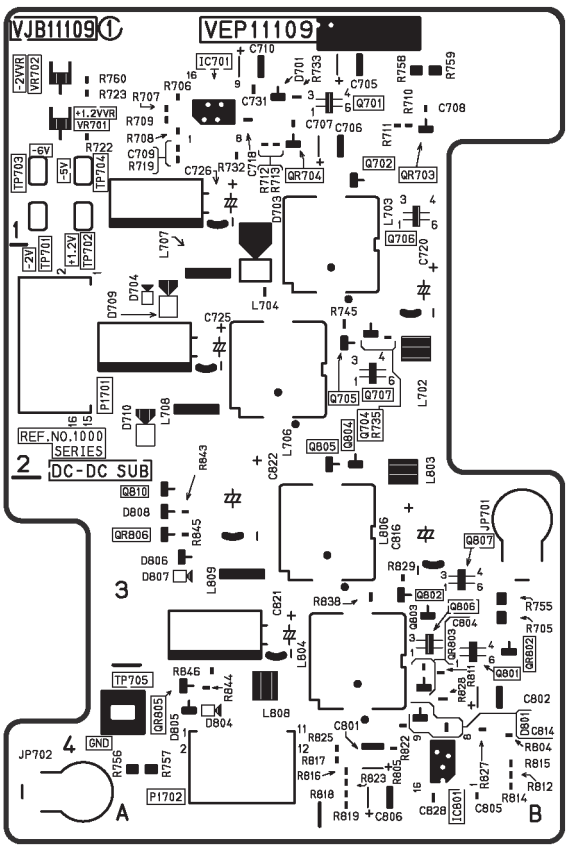
DC-DC SUB P.C. BOARD (VEP11109A)

REF	LOC	REF	LOC
P701	A2	QR702	A1
P702	A4	QR705	A1
Q703	B1		
Q708	A1		
Q709	B2		
Q710	A2		
Q711	A2		
Q712	A2		
Q801	B4		
Q808	B3		
Q809	B3		
Q811	A3		
QR701	B1		

REF	LOC	REF	LOC	REF	LOC
IC701	A1	Q804	B2	TP705	A4
IC801	B4	Q805	B2	VR701	A1
P701	A2	Q806	B3	VR702	A1
P702	A4	Q807	B3		
Q701	B1	Q810	A3		
Q702	B1	QR704	A1		
Q703	B1	QR802	B3		
Q704	B2	QR805	A4		
Q705	B2	QR806	A3		
Q706	B1	TP701	A1		
Q707	B2	TP702	A1		
Q801	B3	TP703	A1		
Q802	B3	TP704	A1		



(FOIL SIDE)



(COMPONENT SIDE)

POWER MAIN P.C. BOARD (VEP11104A)

JAPAN ONLY

⚠ 警 告	
感電注意	AC100V の加わっている活電部（充電部、活電部）に直接触れないでください。 ＋ 感電ややけどの可能性があります。

① ⚠ 警告 ⚠印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

② ▬ 内は充電部です。 AC 100V が加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。

③ 部品交換時には、電源プラグをぬいてから行ってください。

④ 一次側（充電部）の電圧・波形は、一次側アースを基準に測定してください。

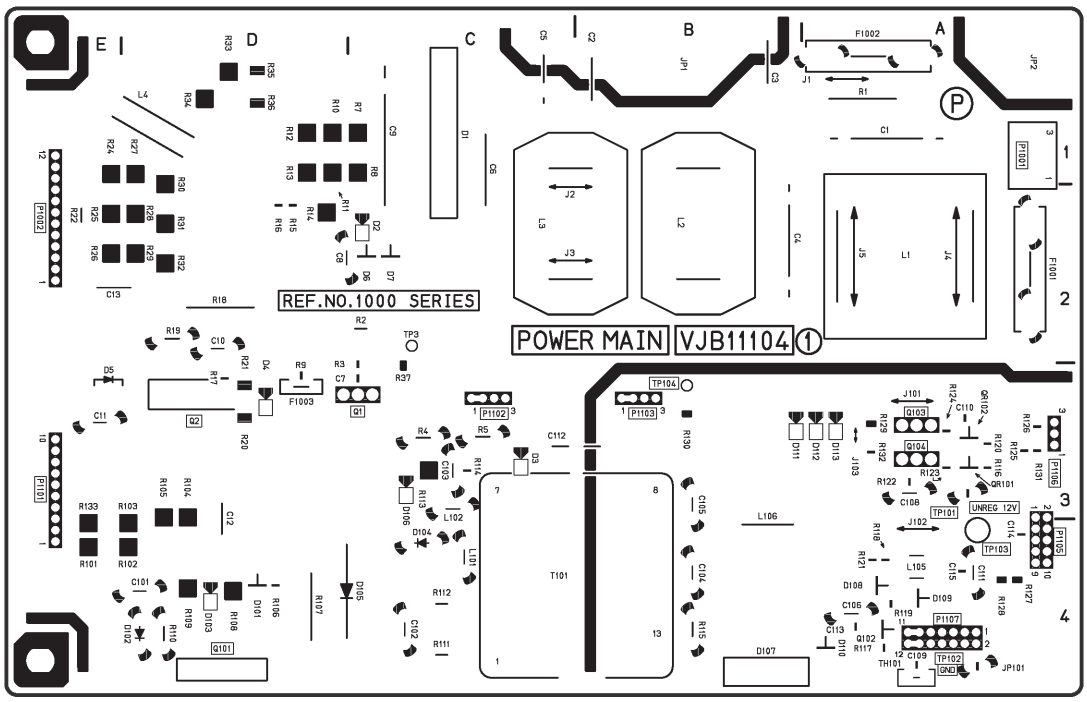
⑤ 部品品番は、部品価格表で確認の上交換ください。

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CAUTION

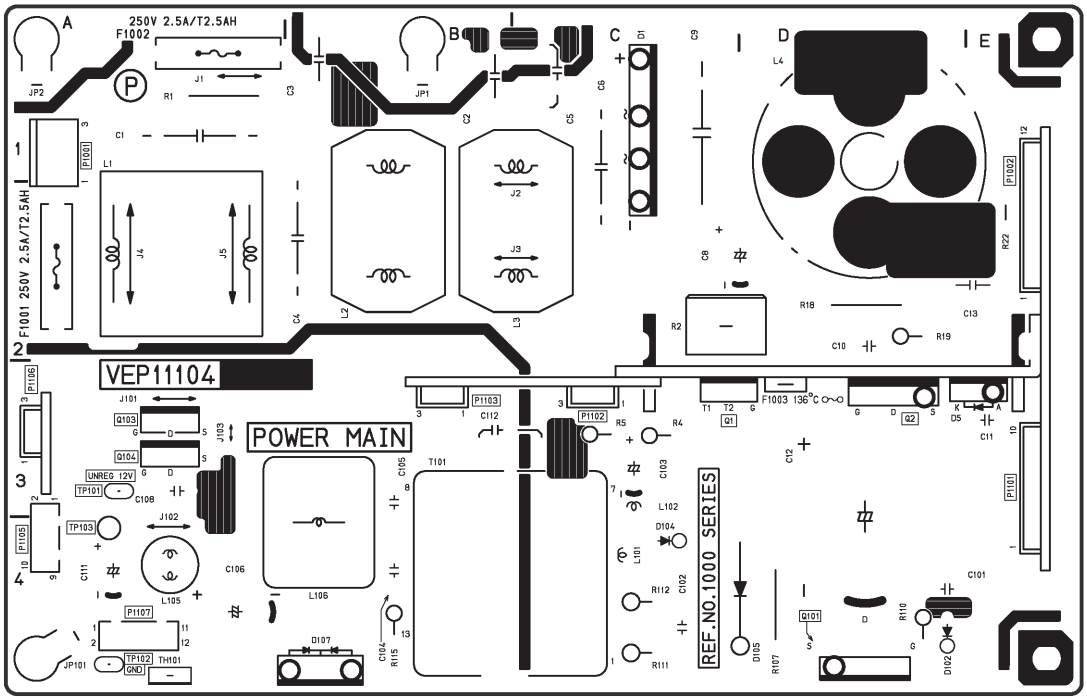
THE ▬ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

REF	LOC
P1	A1
P2	E2
P101	E3
P102	C3
P103	B3
P105	A4
P106	A3
P107	A4
Q1	C3
Q2	D3
Q101	D4
Q102	A4
Q103	A3
Q104	A3
QR101	A3
QR102	A3
TP101	A3
TP102	A4
TP103	A4



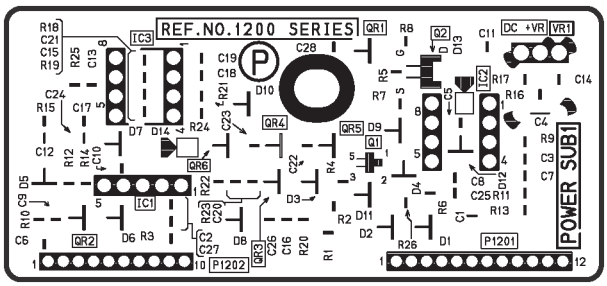
(FOIL SIDE)

REF	LOC
P1	A1
P2	E2
P101	E3
P102	C3
P103	B3
P105	A4
P106	A3
P107	A4
Q1	C3
Q2	D3
Q101	D4
Q103	A3
Q104	A3
TP101	A3
TP102	A4
TP103	A4

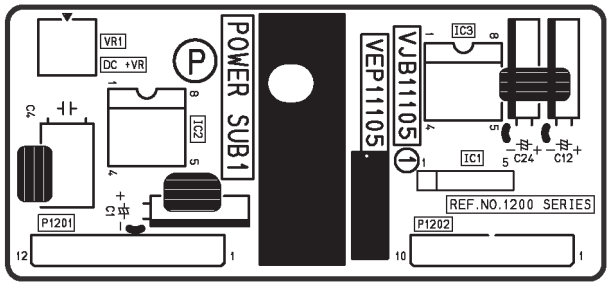


(COMPONENT SIDE)

POWER SUB1 P.C. BOARD (VEP11105A)

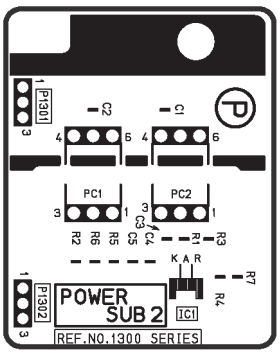


(FOIL SIDE)

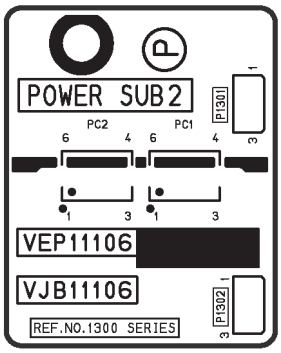


(COMPONENT SIDE)

POWER SUB2 P.C. BOARD (VEP11106A)

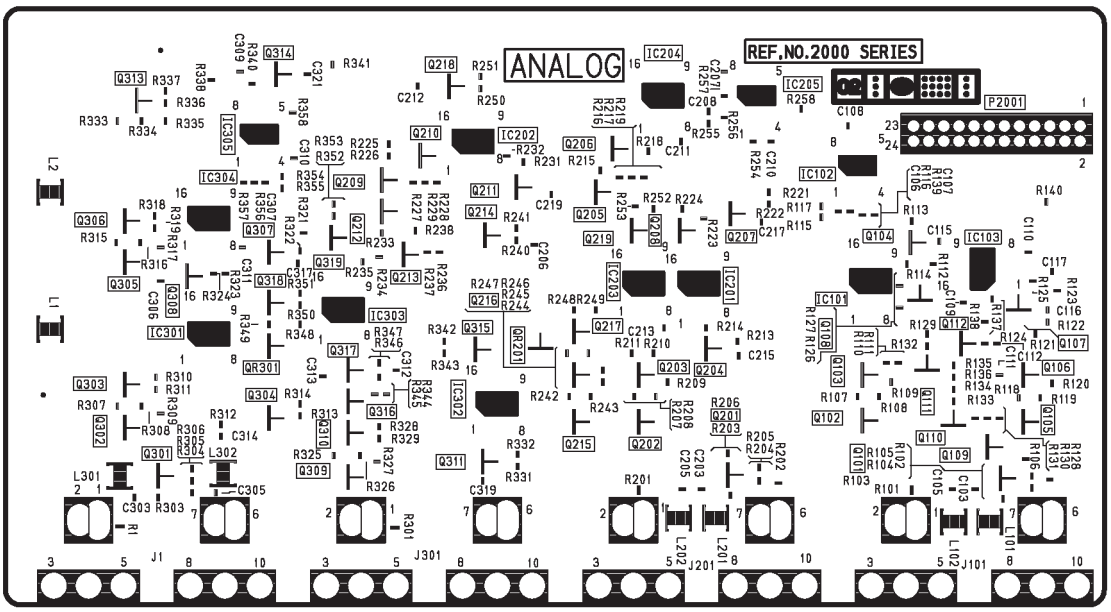


(FOIL SIDE)

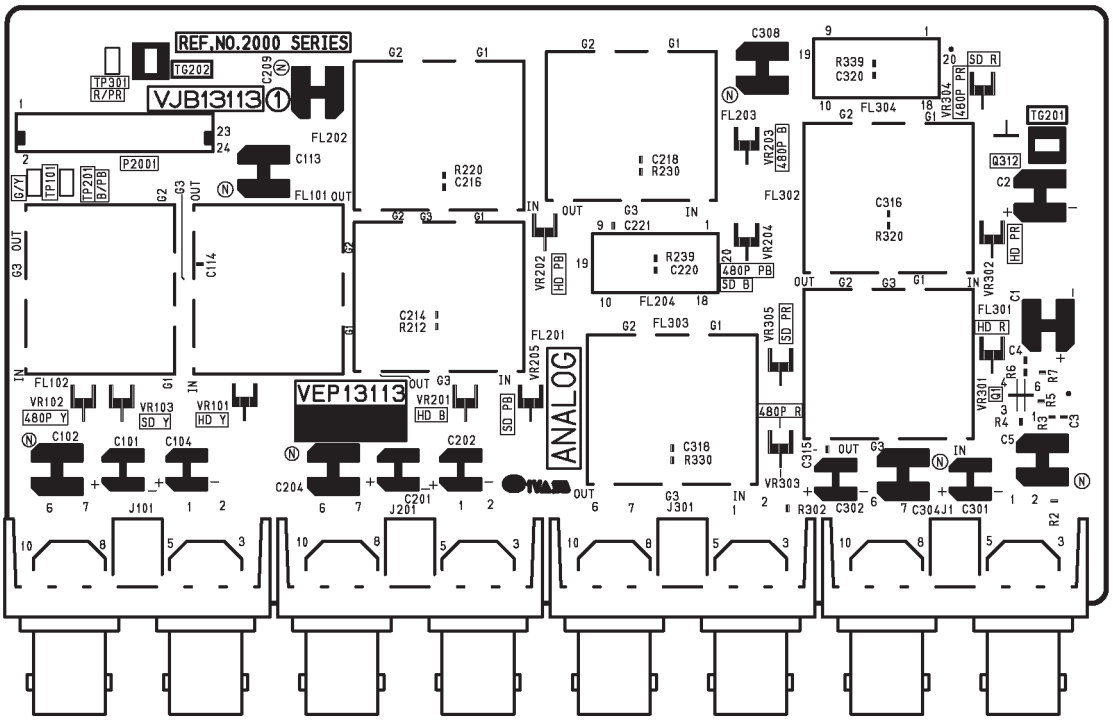


(COMPONENT SIDE)

BT-YA100P
ANALOG P.C.BOARD (VEP13113A)



(FOIL SIDE)

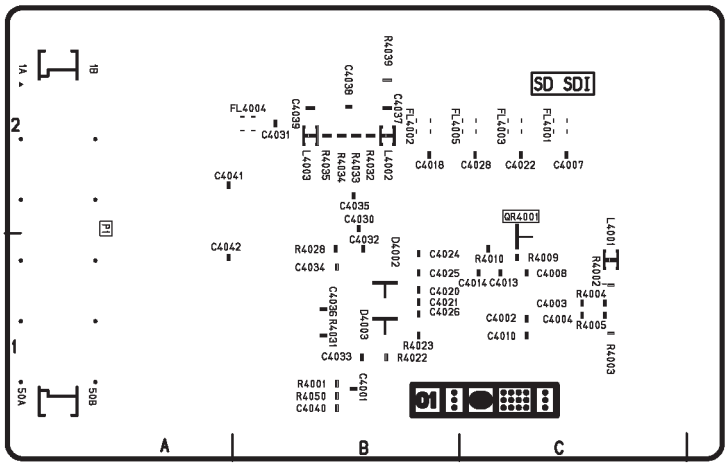


(COMPONENT SIDE)

BT-YA200P

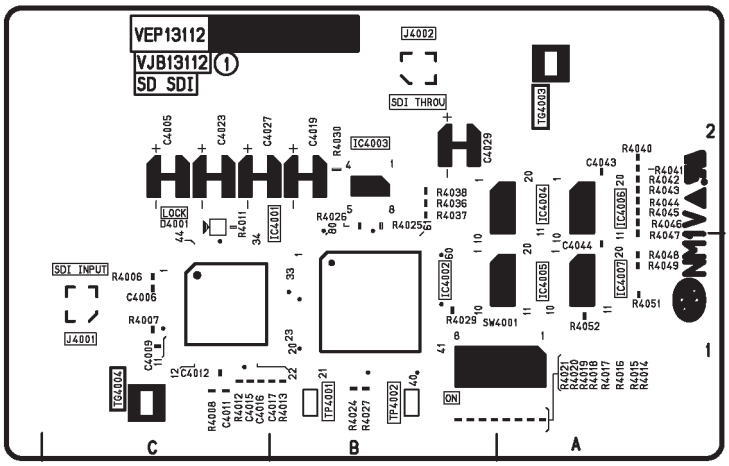
SD-SDI P.C. BOARD (VEP13112A)

REF	LOC
P1	A1
QR4001	C2



(FOIL SIDE)

REF	LOC
IC4001	C1
IC4002	B1
IC4003	B2
IC4004	A2
IC4005	A1
IC4006	A2
IC4007	A1
TP4001	B1
TP4002	B1
TG4003	A2
TG4004	C1

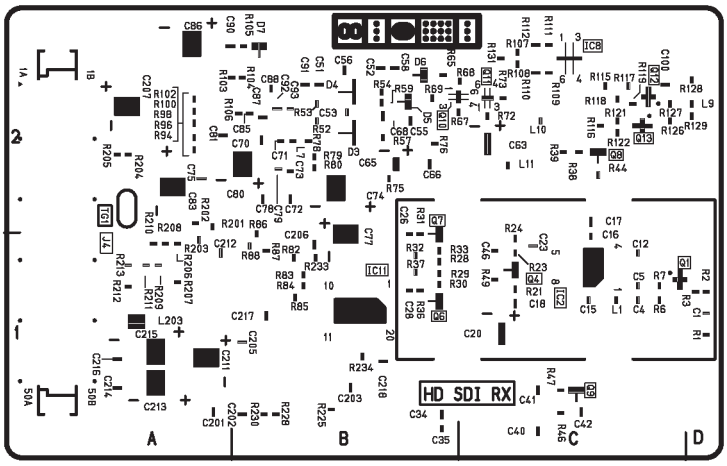


(COMPONENT SIDE)

BT-YA300P

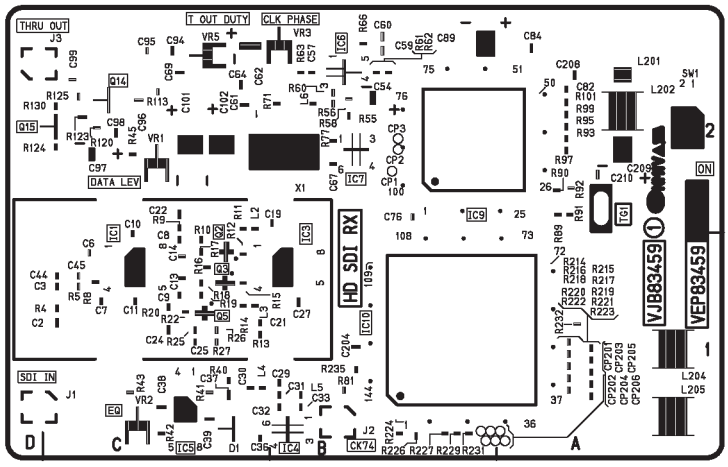
HD-SDI P.C. BOARD (VEP83459B)

REF	LOC
IC2	C1
IC8	C2
IC11	B1
Q1	C1
Q4	C1
Q6	B1
Q7	B1
Q8	C2
Q9	C1
Q10	B2
Q11	C2
Q12	C2
Q13	C2
TG1	A2



(FOIL SIDE)

REF	LOC	REF	LOC
IC1	C1	SW1	A2
IC3	B1	TG1	A2
IC4	B1	VR1	C2
IC5	C1	VR2	C1
IC6	B2	VR3	B2
IC7	B2	VR5	C2
IC9	B2		
IC10	B1		
Q2	C1		
Q3	C1		
Q5	C1		
Q14	C2		
Q15	C2		



(COMPONENT SIDE)

SECTION 7

EXPLODED VIEWS
&
REPLACEMENT PARTS LISTS

Note:

1. *Be sure to make your orders of replacement parts according to this list.
2. Unless otherwise specified, all resistors are in OHMS, K=1,000 OHMS, all capacitors are in MICROFARADS (μF), P=μμF.
3. The P.C. Board untils marked with "■" shown below the main assembled parts.
4. The parts marked with Ⓔ on the exploded view show the electric parts.
5. IMPORTANT SAFETY NOTICE
   Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
6. The marking (RTL) indicates the retention time is limited for this item.
   After the discontinuation of this assembly in production, it will no longer be available.

CONTENTS

BT-LH1800P/E/1500P/E CHASSIS FRAME ASSEMBLY (1) PRT-1
BT-LH1800P/E/1500P/E CHASSIS FRAME ASSEMBLY (2) PRT-3
BT-LH1800P/E/1500P/E PACKING PARTS ASSEMBLY PRT-5
BT-LH1800P/E/1500P/E ELECTRICAL REPLACEMENT PARTS LIST PRT-6
BT-YA100P PACKING PARTS ASSEMBLY PRT-19
BT-YA100P ELECTRICAL REPLACEMENT PARTS LIST PRT-20
BT-YA200P PACKING PARTS ASSEMBLY PRT-22
BT-YA200P ELECTRICAL REPLACEMENT PARTS LIST PRT-23
BT-YA300P PACKING PARTS ASSEMBLY PRT-24
BT-YA300P ELECTRICAL REPLACEMENT PARTS LIST PRT-25
BT-YA320P PACKING PARTS ASSEMBLY PRT-27
BT-YA320P ELECTRICAL REPLACEMENT PARTS LIST PRT-28
BT-MA1800P PACKING PARTS ASSEMBLY PRT-30
BT-MA1500P PACKING PARTS ASSEMBLY PRT-31

SERVICING FIXTURES &TOOLS

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VFK1590	C PLD WRITER	1	
2	VFK1791	VERSION UP SOFTWARE	1	
3	VFK1792	GAMMA CORRECTION SOFTWARE	1	
4	VFK1793	EXTENSION CABLE (A)	1	
5	VFK1794	EXTENSION CABLE (B)	1	
6	VQL9821	PACKING LABEL	2	FOR BT-LH1500P/LH1800P
6	VFK1795	EXTENSION CABLE (C)	1	
7	VFK1796	EXTENSION CABLE (D)	1	
8	VFK1797	EXTENSION CABLE (E)	1	
9	VFK1798	EXTENSION CABLE (F)	1	
10	VFK1799	EXTENSION CABLE (G)	1	
11	VFK1800	EXTENSION CABLE (H)	1	

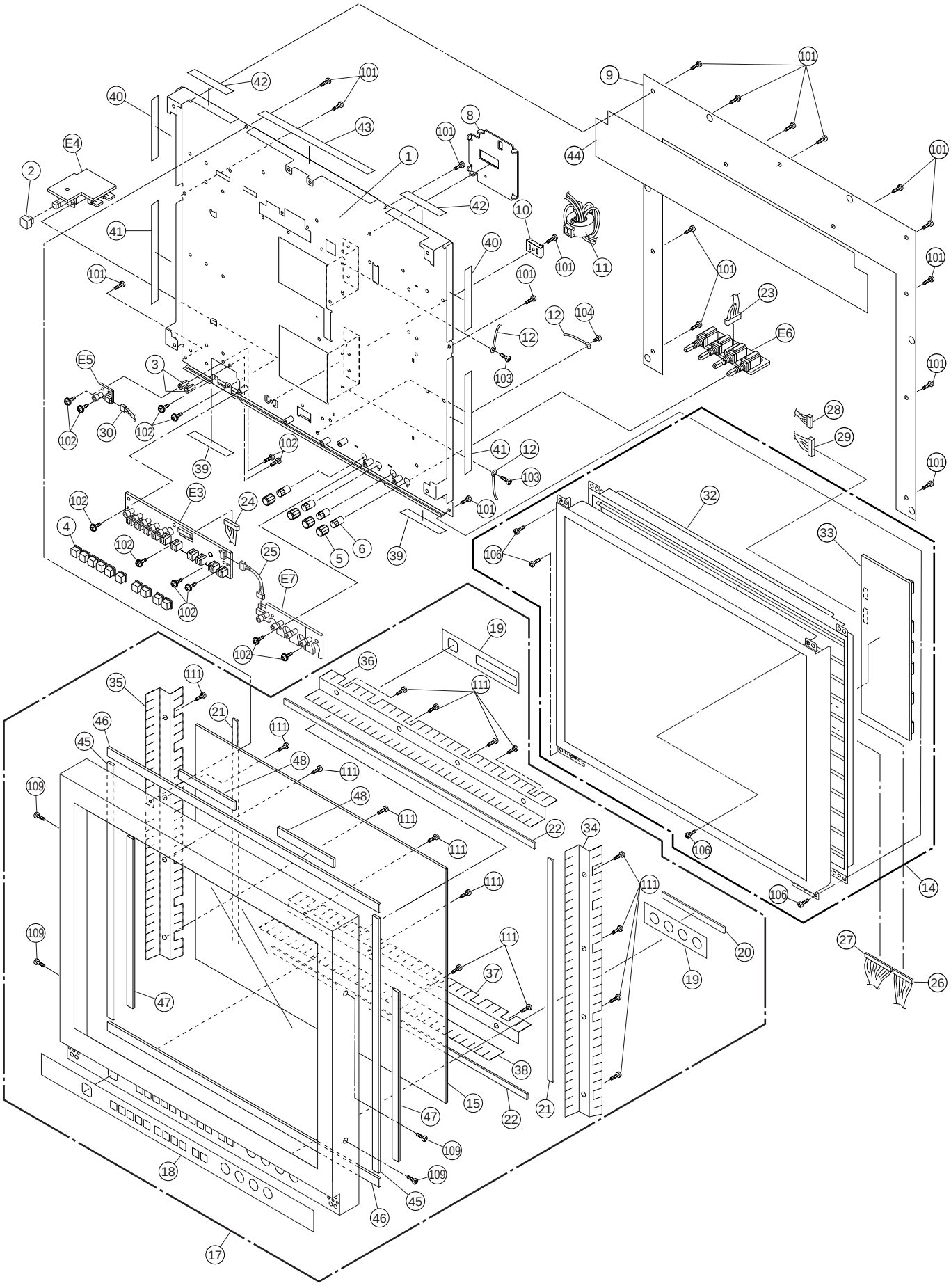
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

BT-LH1800P/E/1500P/E CHASSIS FRAME ASSEMBLY (1)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VMP7153	CHASSIS	1	FOR BT-LH1500P
1	VMP7551	CHASSIS	1	FOR BT-LH1500E
1	VMP7148	CHASSIS	1	FOR BT-LH1800P
1	VMP7545	CHASSIS	1	FOR BT-LH1800E
2	QGUG1040AA	POWER SWITCH BUTTON	1	
3	VMS6082	SPACER	2	
4	VGU9106ZH	OPERATION BUTTON	10	
5	VGU9107K	KNOB ACCESSORY	4	
6	VGU6484	BUTTON	4	
8	VSC5362	LSI HEAT SINK	1	
9	VMP7147	REAR PANEL	1	FOR BT-LH1800P/E
10	VMX3210	FERRITE BOARD	1	
11	J0KG00000081	FERRITE CORE	1	
12	VJF1443	CLAMPER	3	
14	L5BDD3Q00012	LCD PANEL (15 INCH)	1	FOR BT-LH1500P/E
14	L5BDD4R00001	LCD PANEL (18 INCH)	1	FOR BT-LH1800P/E
15	VGQ6676	ACRYL WINDOW	1	FOR BT-LH1500P/E
15	VGQ6675	ACRYL WINDOW	1	FOR BT-LH1800P/E
17	VGP5734	FRONT PANEL	1	FOR BT-LH1500P
17	VGP5859	FRONT PANEL	1	FOR BT-LH1500E
17	VGP5733	FRONT PANEL	1	FOR BT-LH1800P
17	VGP5858	FRONT PANEL	1	FOR BT-LH1800E
18	VGH4567	SWITCH NAME PLATE	1	FOR BT-LH1500P/E
18	VGH4566	SWITCH NAME PLATE	1	FOR BT-LH1800P/E
19	VGF0936	LED SHIELDING LIGHT PIECE	1	
20	VMT1044	DUSTPROOF CUSHION (L)	1	
21	VMT1401	DUSTPROOF CUSHION (H)	2	FOR BT-LH1500P/E
21	VMT1399	DUSTPROOF CUSHION (H)	2	FOR BT-LH1800P/E
22	VMT1402	DUSTPROOF CUSHION (V)	2	FOR BT-LH1500P/E
22	VMT1400	DUSTPROOF CUSHION (V)	2	FOR BT-LH1800P/E
23	VEE0Q46	CABLE	1	
24	VEE0Q47	CABLE	1	
25	VEE0Q48	CABLE	1	
26	VEE0Q53	CABLE	1	
27	VEE0Q54	CABLE	1	
28	VEE0Q05	CABLE	1	
29	VEE0Q50	CABLE	1	
30	VEE0Q49	CABLE	1	
32	VEK9980	BACK LIGHT ASS'Y	1	FOR BT-LH1500P/E
32	VEK9982	BACK LIGHT ASS'Y	1	FOR BT-LH1800P/E
33	VEK9981	INVERTER POWER ASS'Y	1	FOR BT-LH1500P/E
33	VEK9983	INVERTER POWER ASS'Y	1	FOR BT-LH1800P/E
34	VMP7546	SHIELD ANGLE (L)	1	FOR BT-LH1500E
34	VMP7540	SHIELD ANGLE (L)	1	FOR BT-LH1800E
35	VMP7547	SHIELD ANGLE (R)	1	FOR BT-LH1500E
35	VMP7541	SHIELD ANGLE (R)	1	FOR BT-LH1800E
36	VMP7548	SHIELD ANGLE (U)	1	FOR BT-LH1500E
37	VMP7549	SHIELD ANGLE (LF)	1	FOR BT-LH1500E
37	VMP7543	SHIELD ANGLE (LF)	1	FOR BT-LH1800E
38	VMP7550	SHIELD ANGLE (LR)	1	FOR BT-LH1500E
38	VMP7544	SHIELD ANGLE (LR)	1	FOR BT-LH1800E
39	VMT1410	GASKET	2	FOR BT-LH1800E
40	VMT7413	GASKET	2	FOR BT-LH1500E
40	VMT1411	GASKET	2	FOR BT-LH1800E
41	VMT1417	GASKET	2	FOR BT-LH1500E
41	VMT1412	GASKET	2	FOR BT-LH1800E
42	VMT1416	GASKET	2	FOR BT-LH1500E
42	VMT1413	GASKET	2	FOR BT-LH1800E
43	VMT1412	GASKET	1	FOR BT-LH1500E
43	VMT1414	GASKET	1	FOR BT-LH1800E
44	VMZ3359	DUST SHEET	1	FOR BT-LH1800P/E
45	VMT1329	GASKET (A)	2	FOR BT-LH1500P/E
45	VMT1327	GASKET (A)	2	FOR BT-LH1800P/E
46	VMT1330	GASKET	2	FOR BT-LH1500P
46	VMT1328	GASKET	2	FOR BT-LH1800P
47	VMT1364	GASKET	2	FOR BT-LH1500P
47	VMT1363	GASKET	2	FOR BT-LH1800P
48	VMT1366	GASKET	2	FOR BT-LH1500P
48	VMT1365	GASKET	2	FOR BT-LH1800P
101	XTB3+6FFZ	SCREW	18	PCS:7 BT-LH1500P/E
102	XYN3+K8	SCREW	12	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
103	XTW3+6L	SCREW	2	
104	XYN4+E6VW	SCREW	1	
106	XSB3+10S	SCREW	1	FOR BT-LH1500P/E
106	XSB4+8	SCREW	1	FOR BT-LH1800P
106	XSB4+8S	SCREW	4	FOR BT-LH1800E
109	XYN4+F8FZ	SCREW	4	
111	XYN26+J6	SCREW	16	
E3	VEP10106A	FRONT P.C.BOARD	1	
E4	VEP11103A	AC SW P.C.BOARD	1	
E5	VEP10111A	POWER LED P.C.BOARD	1	
E6	VEP10107A	VR P.C.BOARD	1	
E7	VEP10108A	LED P.C.BOARD	1	

BT-LH1800P/E/1500P/E CHASSIS FRAME ASSEMBLY (1)



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

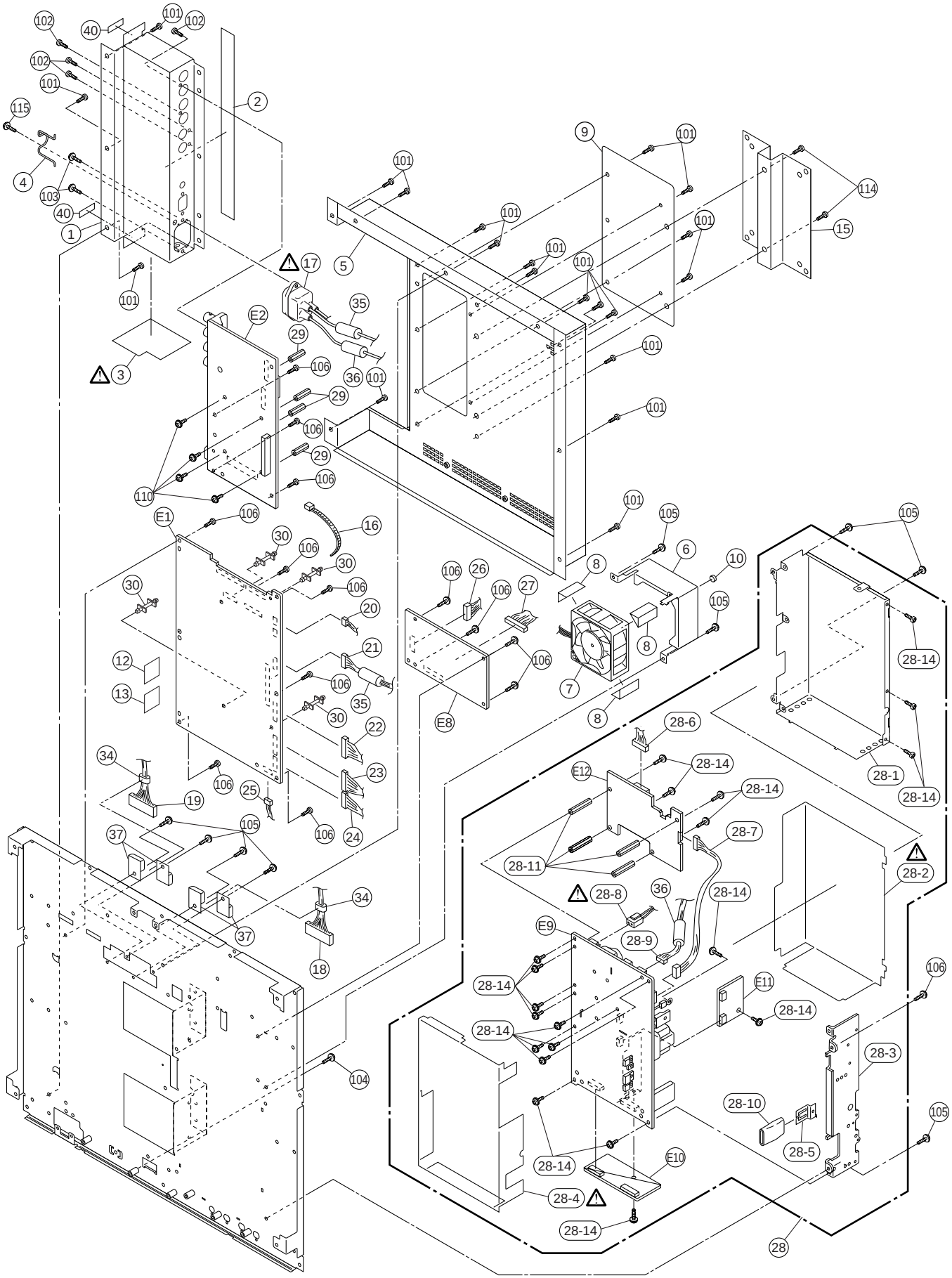
BT-LH1800P/E/1500P/E CHASSIS FRAME ASSEMBLY (2)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VJH1223	TERMINAL PLATE	1	FOR BT-LH1500P
1	VJH1230	TERMINAL PLATE	1	FOR BT-LH1500E
1	VJH1215	TERMINAL PLATE	1	FOR BT-LH1800P
1	VJH1229	TERMINAL PLATE	1	FOR BT-LH1800E
2	VGH4568	TERMINAL NAME PLATE	1	
⚠ 3	VMZ3250	INSULATION BARIER (SW)	1	FOR BT-LH1500P/LH1800P
⚠ 3	VMZ3331	INSULATION BARRIER (SW)	1	FOR BT-LH1500E/LH1800E
4	VML2903	AC CORD HOOK	1	
5	VMP7154	BACK COVER	1	FOR BT-LH1500P/E
5	VMP7149	BACK COVER	1	FOR BT-LH1800P/E
6	VMP7145	FAN ANGLE	1	
7	VRF0194	FAN MOTOR	1	L6FALEDH0001
8	VMX3211	FAN CUSHION	3	
9	VMP7146	OPTION COVER	1	
10	VMT1360	FAN SPACER	1	
12	VMZ3274	HEATING SHEET (A)	1	
13	VMZ3275	HEATING SHEET (B)	1	
15	VMP7157	VESA ANGLE	1	
16	VJF1157	HARNESS	1	
⚠ 17	VEE0Q03	CABLE (AC INLET-AC SW)	1	
18	VWJ45E5180L0	CABLE (MAIN-15LCD)	1	FOR BT-LH1500P/E
18	VEE0Q54	CABLE (MAIN-18LCD)	1	FOR BT-LH1800P/E
19	VWJ30E5180L0	CABLE (MAIN-15LCD)	1	FOR BT-LH1500P/E
19	VEE0Q53	CABLE (MAIN-18LCD)	1	FOR BT-LH1800P/E
20	VEE0Q02	CABLE (DC-MAIN)	1	
21	VEE0Q50	CABLE (MAIN-LCD)	1	
22	VEE0Q45	CABLE (MAIN-SUB)	1	
23	VEE0Q46	CABLE (MAIN-VR)	1	
24	VEE0Q47	CABLE (MAIN-FRONT)	1	
25	VEE0Q49	CABLE (MAIN-LED)	1	
26	VEE0Q02	CABLE (DC-MAIN)	1	
27	VEE0Q01	CABLE (DC-DC)	1	
28	VEK9811	POWER ASS'Y	1	
28-1	VMP7150	POWER CASE	1	
⚠ 28-2	VMZ3248	INSULATION BARRIER (U)	1	
28-3	VSC5348	HEAT SINK L	1	
⚠ 28-4	VMZ3247	INSULATION BARRIER (L)	1	
28-5	VMP5282	TRANSISTOR CLIP	1	
28-6	VEE0Q01	CABLE	1	
28-7	VEE0Q00	CABLE	1	
⚠ 28-8	VEE0Q04	CABLE	1	
28-9	VEE0Q05	CABLE	1	
28-10	VMZ2187	INSULATION COVER	1	
28-11	VMS7084	SPACER	4	
28-14	XYN3+F6	SCREW	20	
29	VMS4911	PIN	4	
30	VMX3209	P.C.BOARD SPACER	4	
34	J0KD00000062	FLAT CORE	2	FOR BT-LH1500E/LH1800E
35	J0KG00000001	FERRITE CORE	2	VLP0123
				FOR BT-LH1500E/LH1800E
36	J0KG00000011	FERRITE CORE	2	FOR BT-LH1500E/LH1800E
37	VMX3262	FLAT CORE HOLDER	4	FOR BT-LH1500E/LH1800E
40	VMT1409	GASKET (A)	2	FOR BT-LH1500E/LH1800E
101	XTB3+6FFZ	SCREW	20	
102	XTB3+8GFZ	SCREW	4	
103	XYN3+J10FZ	SCREW	2	
104	XYN3+C6	SCREW	1	
105	XTW3+6L	SCREW	9	
106	XYN3+F8	SCREW	14	
110	XYN26+F8	SCREW	4	
114	XYN4+F10FZ	SCREW	2	
115	XYE4+EF8	SCREW	1	
E1	VEP16103B	MAIN P.C.BOARD	1	FOR BT-LH1500P
E1	VEP16103E	MAIN P.C.BOARD	1	FOR BT-LH1500E
E1	VEP16103A	MAIN P.C.BOARD	1	FOR BT-LH1800P
E1	VEP16103D	MAIN P.C.BOARD	1	FOR BT-LH1800E
E2	VEP13111A	SUB P.C.BOARD	1	FOR BT-LH1500P/LH1800P
E2	VEP13111C	SUB P.C.BOARD	1	FOR BT-LH1500E/LH1800E
E8	VEP11108A	DC DC P.C.BOARD	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
E9	VEP11104A	POWER MAIN P.C.BOARD	1	
E10	VEP11105A	POWER SUB 1 P.C.BOARD	1	
E11	VEP11106A	POWER SUB 2 P.C.BOARD	1	
E12	VEP11109A	DC DC SUB P.C.BOARD	1	

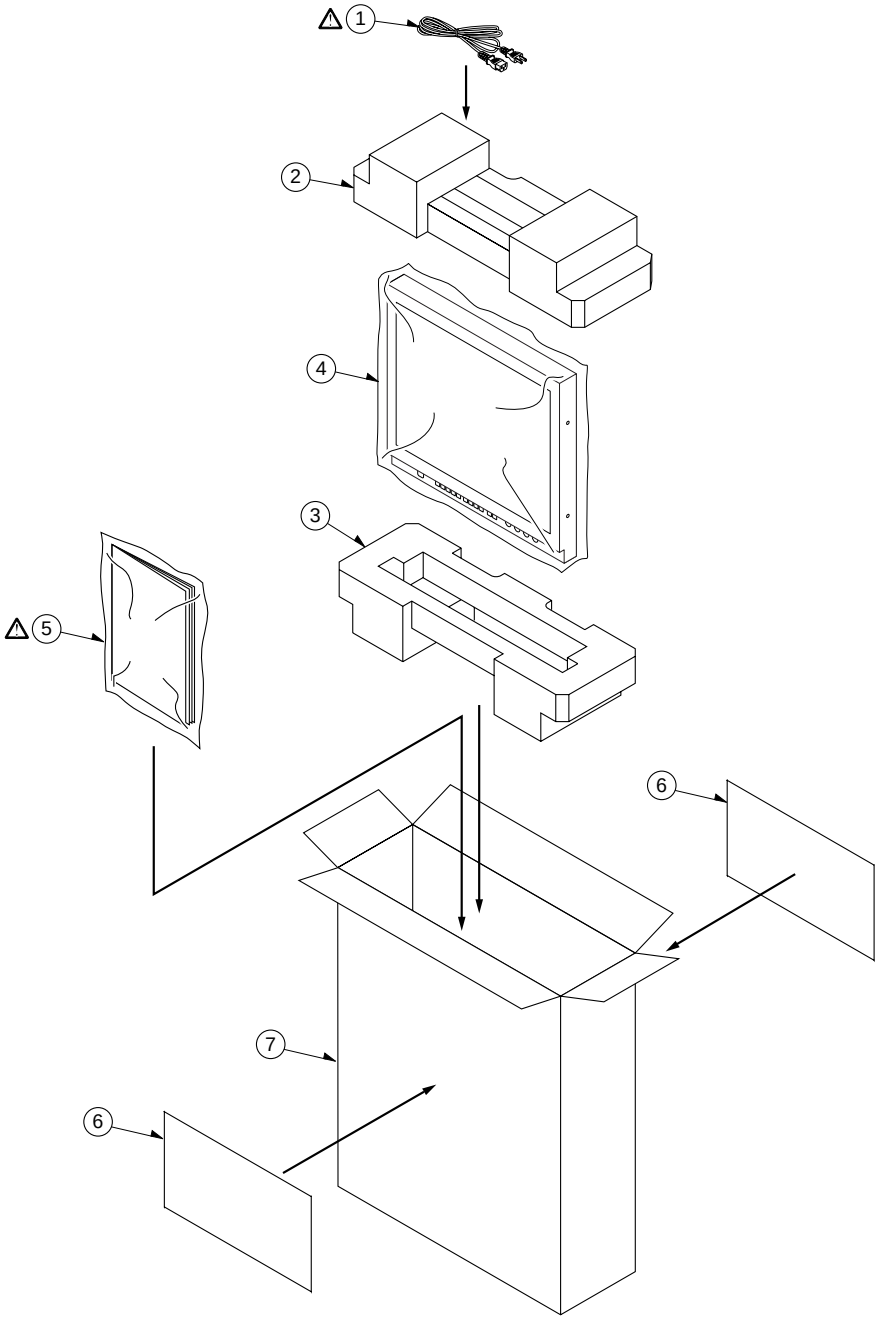
Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-LH1800P/E/1500P/E CHASSIS FRAME ASSEMBLY (2)



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-LH1800P/E/1500P/E PACKING PARTS ASSEMBLY



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-LH1800P/E/1500P/E PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ 1	VJA0488	POWER CODE	1	FOR BT-LH1500P/LH1800P
⚠ 1	VJA0774	POWER CODE	1	FOR BT-LH1500E/LH1800E
⚠ 1	VJA0775	POWER CODE	1	FOR BT-LH1500E/LH1800E
2	VPN5786	CUSHION (UPPER)	2	FOR BT-LH1500P/E
2	VPN5784	CUSHION (UPPER)	1	FOR BT-LH1800P/E
3	VPN5785	CUSHION (LOWER)	1	
4	VPF0671	CUSHION COVER	1	
⚠ 5	VQT9921	OPERATING INSTRUCTIONS	1	FOR BT-LH1500P/LH1800P
⚠ 5	VQT0A29	OPERATING INSTRUCTIONS	1	FOR BT-LH1500E/LH1800E
6	VQL9821	PACKING LABEL	2	FOR BT-LH1500P/LH1800P
6	VQL0A23	PACKING LABEL	2	FOR BT-LH1500E/LH1800E
7	VPG0Q24	PACKING CASE	1	FOR BT-LH1500P/E
7	VPG0Q23	PACKING CASE	1	FOR BT-LH1800P/E

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

BT-LH1800P/E/1500P/E ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP16103B	MAIN P.C.BOARD	1	(RTL)FOR BT-LH1500P
■ E1	VEP16103E	MAIN P.C.BOARD	1	(RTL)FOR BT-LH1500E
■ E1	VEP16103A	MAIN P.C.BOARD	1	(RTL)FOR BT-LH1800P
■ E1	VEP16103D	MAIN P.C.BOARD	1	(RTL)FOR BT-LH1800E
■ E2	VEP13111A	SUB P.C.BOARD	1	(RTL)FOR BT-LH1500P/LH1800P
■ E2	VEP13111C	SUB P.C.BOARD	1	(RTL)FOR BT-LH1500E/LH1800E
■ E3	VEP10106A	FRONT P.C.BOARD	1	(RTL)
■ E4	VEP11103A	AC SW P.C.BOARD	1	(RTL)
■ E5	VEP10111A	POWER LED P.C.BOARD	1	(RTL)
■ E6	VEP10107A	VR P.C.BOARD	1	(RTL)
■ E7	VEP10108A	LED P.C.BOARD	1	(RTL)
■ E8	VEP11108A	DC DC P.C.BOARD	1	(RTL)
■ E9	VEP11104A	POWER MAIN P.C.BOARD	1	(RTL)
■ E10	VEP11105A	POWER SUB 1 P.C.BOARD	1	(RTL)
■ E11	VEP11106A	POWER SUB 2 P.C.BOARD	1	(RTL)
■ E12	VEP11109B	DC DC SUB P.C.BOARD	1	(RTL)
■ E1	VEP16103B	MAIN P.C.BOARD	1	(RTL)FOR BT-LH1500P
■ E1	VEP16103E	MAIN P.C.BOARD	1	(RTL)FOR BT-LH1500E
■ E1	VEP16103A	MAIN P.C.BOARD	1	(RTL)FOR BT-LH1800P
■ E1	VEP16103D	MAIN P.C.BOARD	1	(RTL)FOR BT-LH1800E
C60001	EEVHB1C470P	E.CAPACITOR 16V 47U	1	
C60002-04	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	3	
C60005	EEVHB1C470P	E.CAPACITOR 16V 47U	1	
C60006,07	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C60008	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C60009,10	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C60011	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C60012,13	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C60014	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C60201	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C60202,03	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C60206	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C61001	EEVHB1H1R0	E.CAPACITOR 50V 1U	1	
C61002	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C61003	ECST1AX226Z	T.CAPACITOR CH 10V 22U	1	
C61004	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C61005,06	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	2	
C61007	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C61008	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C61009	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C61010	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C61012-14	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	3	
C61015	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C61016	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C61018,19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C61022	EEVHB1H1R0	E.CAPACITOR 50V 1U	1	
C61023	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C61024,25	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C61026	EEVHB1HR33	E.CAPACITOR 50V 0.33U	1	
C61027	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C61028	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C62001,02	EEFCD0J470R	E.CAPACITOR 6.3V 47U	2	
C62003-25	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	23	
C62026,27	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C62501	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C62503,04	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C62506-10	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	5	
C62512-14	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	3	
C62516-22	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	7	
C63000-02	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	3	
C63003,04	EEFCD0J470R	E.CAPACITOR 6.3V 47U	2	
C63005-34	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	30	
C63035,36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C63037	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C64001	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C64002	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C64003	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C64004-31	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	28	
C64032,33	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C65001	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C65002-26	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	25	
C65501	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C65502-26	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	25	
C66002	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C66003,04	EEFCD0J470R	E.CAPACITOR 6.3V 47U	2	
C66005	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C66006-24	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	19	
C66025	ECUX1H681JCV	C.CAPACITOR CH 50V 680P	1	
C66026	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C66027,28	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C66029	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C66030	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
C66031	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C66032	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C66033	EEFCD0K330R	E.CAPACITOR 8V 33U	1	
C66034	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C66035	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C66036	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
C66037	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C66038	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C66039	EEFCD0K330R	E.CAPACITOR 8V 33U	1	
C67001,02	EEFCD0J470R	E.CAPACITOR 6.3V 47U	2	
C67003-30	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	28	
C67031	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C67032	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
C67033	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C67034	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C67035	EEFCD0K330R	E.CAPACITOR 8V 33U	1	
C67036	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C67037	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C67038	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
C67039	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C67040	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C67041	EEFCD0K330R	E.CAPACITOR 8V 33U	1	
C67042,43	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C68001	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C68002	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C68003	EEVHB1C470P	E.CAPACITOR 16V 47U	1	
C68004-08	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	5	
C68009	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C68010	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C68011	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C68012	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C68013	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C68014	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C68015,16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C68017-22	EEVHB0J470	E.CAPACITOR 6.3V 47U	6	
C68023,24	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C68025-40	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	16	
C68041	EEVHB1C470P	E.CAPACITOR 16V 47U	1	
C68042	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C68501	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C68508-11	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C68512	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C68513,14	EEVHB1C470P	E.CAPACITOR 16V 47U	2	
C68515	EEVHB1A330	E.CAPACITOR 10V 33U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C68516	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C68520-24	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C68525	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C68526-34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C68535	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C68536	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C68537	ECUX1C683KBV	C.CAPACITOR CH 16V 0.068U	1	
C68538	ECUX1H681JCV	C.CAPACITOR CH 50V 680P	1	
C68539-41	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C68542	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C68543	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C68544-47	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C68548	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
C68552	ECUX1C106VBP	C.CAPACITOR CH 16V 10U	1	
C68553	ECUX1C274KBN	C.CAPACITOR CH 16V 0.27U	1	
C68554	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C68555	ECUX1H183KBV	C.CAPACITOR CH 50V 0.018U	1	
C69001-04	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	4	
C69005,06	EEVHB1A330	E.CAPACITOR 10V 33U	2	
C69007,08	EEVHB0J470	E.CAPACITOR 6.3V 47U	2	
C69009-12	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	4	
C69013-45	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	33	
C69046,47	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C69501,02	EEVHB0J470	E.CAPACITOR 6.3V 47U	2	
C69503-32	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	30	
C69533	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
D60201	MA152WK	DIODE	1	
D66001	MA2P701A0L	DIODE	1	
D67001	MA2P701A0L	DIODE	1	
FL61001	J0HAAC000013	FILTER	1	
FL66001	J0HAAC000013	FILTER	1	
FL68501-03	F1J1A105A013	FILTER	3	
FL69001-03	F1J1A105A013	FILTER	3	
FL69501,02	F1J1A105A013	FILTER	2	
IC60001,02	C0JBAZ000852	IC	2	
IC60201	C0ABEB000017	IC	1	
IC61002	TVHT541FT	IC	1	
IC61003	C9ZB00000302	IC	1	
IC61004	C2CBKJ000015	IC	1	
IC61006	C0JBAN000108	IC	1	
IC61007	C0JBAZ000851	IC	1	
IC61009,10	C3EBJC000038	IC	2	
IC61014	TLCX04F	IC	1	
IC61015	C0JBAZ000852	IC	1	
IC61016,17	M51957BFP	IC	2	C0EBH0000062
IC61018	C0JBAZ000851	IC	1	
IC62001	C1ZBZ0001784	IC	1	
IC62002	C1ZBZ0001555	IC	1	
IC62004	C0EBF0000166	IC	1	
IC62005	C0EBD0000142	IC	1	
IC62500	C0ZBZ0000644	IC	1	
IC62503	C3HBKG000002	IC	1	
IC62505	C3HBKG000002	IC	1	
IC63000	C0ZBZ0000646	IC	1	
IC63001	C0ZBZ0000645	IC	1	
IC63002	C1ZBZ0001784	IC	1	
IC63003	C1ZBZ0001555	IC	1	
IC63004	C0EBD0000142	IC	1	
IC63005	C0EBF0000166	IC	1	
IC64002	C1ZBZ0001555	IC	1	
IC64003	C0EBD0000142	IC	1	
IC64004	C0EBF0000166	IC	1	
IC65001-03	C3HBLG000001	IC	3	
IC65501-03	C3HBLG000001	IC	3	
IC66002	C1AB00001658	IC	1	
IC66003	C0ZBZ0000644	IC	1	
IC66004	C9ZB00000302	IC	1	
IC66005,06	C0CBABF00005	IC	2	
IC67001	C1ZBZ0001794	IC	1	
IC67002,03	C0CBABF00005	IC	2	
IC67004	C0EBD0000142	IC	1	
IC67005	C0EBF0000166	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC68001-14	C0JBAZ000852	IC	14	
IC68015,16	C0JBCZ000485	IC	2	
IC68501	C0FBAD000068	IC	1	
IC68502	C0CBABF00005	IC	1	
IC68503	TLCX04F	IC	1	
IC69001	DS90CR288MTD	IC	1	C0ZBZ0000103
IC69002	C1ZBZ0001794	IC	1	
IC69003	C1ZBZ0001555	IC	1	
IC69004	C0JBAZ000852	IC	1	
IC69005	TVHT541FT	IC	1	
IC69006	C0JBAZ000852	IC	1	
IC69007	C0EBD0000142	IC	1	
IC69008	C0EBF0000166	IC	1	
IC69501	MN82860	IC	1	
IC69502	C0JBAZ000852	IC	1	
ID1	VVVSI3902B	SOFTWARE	1	
ID2	VVVSI3864D	SOFTWARE	1	
J60001-09	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	9	
JP60001	K4CD01000007	CABLE TERMINAL	1	
L60001	VLP0328A102	FERRITE CORE	1	
L60002-09	VLF1315A102	FILTER	8	J0JHC0000015
L61001	VLP0328A102	FERRITE CORE	1	
L62001,02	VLP0328A102	FERRITE CORE	2	
L62501,02	VLP0328A102	FERRITE CORE	2	
L63000-02	VLP0328A102	FERRITE CORE	3	
L64001,02	VLP0328A102	FERRITE CORE	2	
L65001	VLP0328A102	FERRITE CORE	1	
L65501	VLP0328A102	FERRITE CORE	1	
L68001-09	VLP0328A102	FERRITE CORE	9	
L69001,02	VLQ0319K100	COIL 10UH	2	G1C100K00023
P60001	K1KA10B00054	CONNECTOR (MALE)	1	
P60002	K1KBE0A00025	CONNECTOR (FEMALE)	1	
P60003	K1KA03B00102	CONNECTOR (MALE)	1	
P60004	VJP3125B004	CONNECTOR (MALE)	1	K1KA04B00113
P60005	VJP3125B003	CONNECTOR (MALE) 3P	1	
P60006	VJP3518D010	CONNECTOR (FEMALE)	1	
P60007	VJP3125D015	CONNECTOR (MALE)	1	K1KA15B00034
P60008	VJP3125B014	CONNECTOR (MALE)	1	
P60202	VJP3125B009	CONNECTOR (MALE)	1	K1KA09B00055
P68001	K1MN45B00006	CONNECTOR (MALE)	1	FOR VEP16103B/E
P68002	K1MN30B00049	CONNECTOR (MALE)	1	FOR VEP16103B/E
P68003	K1KA20B00105	CONNECTOR (MALE)	1	FOR VEP16103A/D
P68004	K1KA30B00052	CONNECTOR (MALE)	1	FOR VEP16103A/D
Q60201	2SD0601A0L	TRANSISTOR	1	
Q68501,02	2SA10220BL	TRANSISTOR	2	
Q68505	2SC2295-B	TRANSISTOR	1	
Q68506	2SA10220BL	TRANSISTOR	1	
Q68513	2SD1328-S	TRANSISTOR	1	
QR60001,02	UN2212	TRANSISTOR-RESISTOR	2	UNR2212
R60002,03	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2	D0GD221JA003
R60004	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R60005-16	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	12	
R60018-29	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	12	
R60201	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R60202	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R60203,04	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R60205	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R60206	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R60207	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R61001	ERJ6RBD113	M.RESISTOR CH 1/10W 11K	1	
R61002	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R61003	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R61004	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R61005	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R61006,07	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R61008	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R61009	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R61011	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R61012	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R61013	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R61014	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R61015	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R61018,19	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R61020-25	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	6	D0GB103JA002
R61026	ERJ6RBD113	M.RESISTOR CH 1/10W 11K	1	
R61027-29	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R61030	ERJ6RBD113	M.RESISTOR CH 1/10W 11K	1	
R61031	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R61032-34	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R61036-64	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	29	D0GB103JA002
R61065	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R61066	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R61068	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R61069	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R61070	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	FOR VEP16103B/E
R61070	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002 FOR VEP16103A/D
R61071,72	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R61073-75	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R62002-04	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	3	
R62005-10	D1H833040002	COMBI.R-R 33	6	
R62011-16	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	6	
R62017	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R62018-21	D1H833040002	COMBI.R-R 33	4	
R62022	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R62023-28	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	6	
R62029-32	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R62033	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R62034	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R62508-33	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	26	
R62542-44	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R62548,49	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R62551-56	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	6	
R63000	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R63001	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R63003-10	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	8	
R63012	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R63013	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R63014-17	D1H833040002	COMBI.R-R 33	4	
R63018-20	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R63021,22	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R63023-30	D1H833040002	COMBI.R-R 33	8	
R63032	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R63033-36	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R63038	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R63044	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R64001,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R64003	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R64004-07	D1H833040002	COMBI.R-R 33	4	
R64009,10	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R64011,12	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R64013-20	D1H833040002	COMBI.R-R 33	8	
R64021	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R64022	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R64023-27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
R64028	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R64029	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R65001-12	D1H833040002	COMBI.R-R 33	12	
R65501-12	D1H833040002	COMBI.R-R 33	12	
R66001	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R66003	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R66004	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R66005,06	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R66007	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R66008	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R66009-19	D1H833040002	COMBI.R-R 33	11	
R66020,21	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2	
R66022	D1H833040002	COMBI.R-R 33	1	
R66023,24	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2	
R66025	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R66026,27	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R66028	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R66029	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R66033	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R66034	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R66035,36	ERJ6RBD101	M.RESISTOR CH 1/10W 100	2	
R66037	ERJ6RBD111	M.RESISTOR CH 1/10W 110	1	
R66038	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1	
R67002,03	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R67005	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R67006	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R67007	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R67008	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R67009,10	D1H833040002	COMBI.R-R 33	2	
R67011-13	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R67014-18	D1H833040002	COMBI.R-R 33	5	
R67019	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R67020-24	D1H833040002	COMBI.R-R 33	5	
R67025	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R67026	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R67030	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R67032-35	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R67036,37	ERJ6RBD101	M.RESISTOR CH 1/10W 100	2	
R67038	ERJ6RBD111	M.RESISTOR CH 1/10W 110	1	
R67039	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1	
R68001-50	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	50	
R68051-72	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	22	
R68501	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R68502	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R68503	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R68504	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R68520	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R68521	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R68522-37	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	16	
R68538,39	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R68540-42	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	3	
R68543-51	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	9	
R68552	ERJ6RBD302	M.RESISTOR CH 1/10W 3K	1	
R68553-59	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	7	
R68560	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R68561	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R68562-80	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	19	
R68583	ERJ6RBD111	M.RESISTOR CH 1/10W 110	1	
R68584	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1	
R68588	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R68589-93	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
R68594	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R68595	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R68596	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R69001-05	ERJ6RBD101	M.RESISTOR CH 1/10W 100	5	
R69009	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R69013,14	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2	
R69015,16	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R69017,18	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R69019	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R69020	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R69021-31	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	11	
R69032	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R69033-45	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	13	
R69046-52	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	7	
R69053-56	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R69057	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R69058	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R69059	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R69060-62	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R69064	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R69065	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R69066,67	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R69068	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R69502	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R69504,05	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R69507,08	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R69510	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R69511	ERJ3RBD243	M.RESISTOR CH 1/16W 24K	1	
R69512-17	D1H833040002	COMBI.R-R 33	6	
R69518-24	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	7	
R69525-27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R69528	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R69529	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
TG60001-07	EYF6CU	TEST POINT	7	
TP60001-03	EYF6CU	TEST POINT	3	
TP60011,12	EYF6CU	TEST POINT	2	
TP60015-18	EYF6CU	TEST POINT	4	
TP60201	EYF6CU	TEST POINT	1	
TP61001-03	EYF6CU	TEST POINT	3	
TP61005-12	EYF6CU	TEST POINT	8	
TP61014	EYF6CU	TEST POINT	1	
TP61016	EYF6CU	TEST POINT	1	
TP61018	EYF6CU	TEST POINT	1	
TP61020,21	EYF6CU	TEST POINT	2	
TP61023,24	EYF6CU	TEST POINT	2	
TP61026	EYF6CU	TEST POINT	1	
TP62001-03	EYF6CU	TEST POINT	3	
TP62005	EYF6CU	TEST POINT	1	
TP62008,09	EYF6CU	TEST POINT	2	
TP62011-14	EYF6CU	TEST POINT	4	
TP62501,02	EYF6CU	TEST POINT	2	
TP62505	EYF6CU	TEST POINT	1	
TP63000	EYF6CU	TEST POINT	1	
TP63003-05	EYF6CU	TEST POINT	3	
TP66001-04	EYF6CU	TEST POINT	4	
TP66007	EYF6CU	TEST POINT	1	
TP66011	EYF6CU	TEST POINT	1	
TP66013	EYF6CU	TEST POINT	1	
TP66015	EYF6CU	TEST POINT	1	
TP66017-19	EYF6CU	TEST POINT	3	
TP67001-06	EYF6CU	TEST POINT	6	
TP68501	EYF6CU	TEST POINT	1	
TP68510,11	EYF6CU	TEST POINT	2	
TP69006	EYF6CU	TEST POINT	1	
TP69011	EYF6CU	TEST POINT	1	
TP69016-19	EYF6CU	TEST POINT	4	
TP69501-03	EYF6CU	TEST POINT	3	
TP69534,35	EYF6CU	TEST POINT	2	
VR60201	EVM7JGA00B52	V.RESISTOR 500	1	
X61001	H0J100500016	CRYSTAL OSCILLATOR	1	
X66001	H0J135500012	CRYSTAL OSCILLATOR	1	FOR VEP16103B/E
X66001	H0J135500012	CRYSTAL OSCILLATOR	1	FOR VEP16103A/D
		MISCELLANEOUS		
	VMX3209	P.C.BOARD SPACER	1	
	VMX2554	POST	3	K9ZZ00000679
	XYN3+F6	SCREW	3	
■ E2	VEP13111A	SUB P.C.BOARD	1	(RTL)FOR BT-LH1500P/LH1800P
■ E2	VEP13111C	SUB P.C.BOARD	1	(RTL)FOR BT-LH1500E/LH1800E
C30001	ECQB1H183JZ	P.CAPACITOR 50V 0.018U	1	
C30101	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C30102-06	EEVHB1HR10	E.CAPACITOR 50V 0.1U	5	
C30107-09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C30110	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C30111-27	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	17	
C30201	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C30202	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C30203-05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C30206	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C30207	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C30208,09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C30210	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C30211,12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C30213	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C30214	EEVHP1C220	E.CAPACITOR 16V 22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C30215	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C30216	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C30217	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C30222,23	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C31001	ECUX1C474KBN	C.CAPACITOR CH 16V 0.47U	1	
C31002	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C31004	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C31005	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C31006	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C31007,08	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C31009	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C31010	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C31011	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C31012	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C31013-15	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C31016	ECJ1VC1H181J	C.CAPACITOR CH 50V 180P	1	
C31017	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C31018	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C31019	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C31020	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C31021,22	EEVHB1A330	E.CAPACITOR 10V 33U	2	
C31023	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C31024	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C31025	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C31026	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C31027	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C31029	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C31030	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C31031	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C31032	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C31033	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C31035	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C31036-39	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C31040	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C31041	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C31042	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C31043	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C31044	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C31045,46	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C31048	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C31049	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C31050-54	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C31055,56	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C31057	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C31058	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C32001	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C32003	EEVHB1E330P	E.CAPACITOR 25V 33U	1	
C32004,05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C32008,09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C32010	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C32011,12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C32013	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C32014	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C32015	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C32016	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C32017	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1	
C32018	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C32019	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C32020	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C32021,22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C32023	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C32024	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
C32025	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C32026,27	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	2	
C32028	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C32029	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1	
C32030	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C32031	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C32032	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C32033	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C32034-37	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C32038	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C32039	ECUX1H040CCV	C.CAPACITOR CH 50V 4P	1	
C32040	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C32041	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C32042	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C32043	EEVHB1H4R7	E.CAPACITOR 50V 4.7U	1	
C32044,45	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C32046,47	EEVHB1A330	E.CAPACITOR 10V 33U	2	
C32048-52	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C32054,55	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C32056	EEVHP1HR47	E.CAPACITOR 50V 0.47U	1	
C32057,58	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C32059,60	EEVHB1A330	E.CAPACITOR 10V 33U	2	
C33001	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C33002	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C33003	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C33004	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C33005	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C33009,10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C33011	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C33012	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C33013	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C33014	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C33015	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C33019,20	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C33021	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C33022	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C33023	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C33024	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C33025	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C33027,28	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C33029	ECJ1VC1H181J	C.CAPACITOR CH 50V 180P	1	
C33030	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C33031	ECJ1VC1H181J	C.CAPACITOR CH 50V 180P	1	
C33032,33	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C33034	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C33036	ECCF1H221JC	C.CAPACITOR 50V 220P	1	
C35001	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C35002	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C35006	ECUX1A105KBV	C.CAPACITOR CH 10V 1U	1	
C35007,08	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C35009	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C35010	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C35023	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C35025,26	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C36001-04	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	4	
C36005,06	EEVHB0J330	E.CAPACITOR 6.3V 33U	2	
C36007,08	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	2	
C36009	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C36010-12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C36013	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C36014-20	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C36021	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	1	
C36022	ECQB1H183JZ	P.CAPACITOR 50V 0.018U	1	
D30101-08	MA157A	DIODE	8	
D30109-17	MA152WK	DIODE	9	
D31001	MA152A	DIODE	1	
D35006	MA157A	DIODE	1	
FL30201	VLF1015	FILTER	1	
FL32001,02	F1J1A105A013	FILTER	2	
FL36001,02	F1J1A105A013	FILTER	2	
IC30101	ADM202JRN	IC	1	C0ZBZ0000171
IC30102-04	TC4053BF	IC	3	C0JBAR000327
IC30105,06	UPC339G2	IC	2	
IC30201	NJM2535M	IC	1	
IC30202	AD817AR	IC	1	C0ABAB000062
IC31001	TC9090AF	IC	1	C1AB00000655
IC31002	C0ABBB000158	IC	1	
IC31003,04	C0JBAS000075	IC	2	
IC31006	YFNJM311M	IC	1	
IC31007	C0DBZGH00001	IC	1	
IC31008	NJM78L09UA	IC	1	C0CBAHC00002
IC32001	NJM78L09UA	IC	1	C0CBAHC00002
IC32003,04	NJM1496M	IC	2	C1CB00000435
IC32005,06	C0JBAS000075	IC	2	
IC32007	C0ABEB000017	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC32008	C0JBAS000075	IC	1	
IC32009	C0ABEB000017	IC	1	
IC32010,11	TC7W53F	IC	2	
IC32012	C0ABEB000017	IC	1	
IC32013	TVHC00FT	IC	1	
IC33001	TC7W53F	IC	1	
IC33002	C0JBAS000075	IC	1	
IC33004	TC7W53F	IC	1	
IC33005	C0JBAS000075	IC	1	
IC33007	TC7W53F	IC	1	
IC33008	C0JBAS000075	IC	1	
IC33010	TC7W53F	IC	1	
IC33011	C0JBAS000075	IC	1	
IC33013	TC7W53F	IC	1	
IC33014	C0JBAS000075	IC	1	
IC33016	TC7W53F	IC	1	
IC33017	C0JBAS000075	IC	1	
IC35001	NJM2535M	IC	1	
IC35002	TC7W53F	IC	1	
IC35003	GS4981-C	IC	1	
IC35004	TC7W00FU	IC	1	
IC35007	C0JBAS000075	IC	1	
IC36001	TLCX240FT	IC	1	
IC36002	C0JBAZ000851	IC	1	
IC36003	TC7W04F	IC	1	C0JBAB000305
IC36004-06	C0JBAF000315	IC	3	
IC36007	C0ZBZ0000104	IC	1	
IC36008	C0JBAE000135	IC	1	
IC36009,10	C0JBAF000233	IC	2	
J30201,02	K1QBB2AB0006	IC	2	
J30203,04	K1CB104B0032	CONNECTOR (FEMALE)	2	
L30101-09	J0JBC0000041	FILTER	9	
L30201,02	VLQ0319K470	COIL 47UH	2	G1C470K00013
L31001-05	VLQ0319K470	COIL 47UH	5	G1C470K00013
L31006	VLQ0163J180	COIL 18UH	1	G1C180J00001
L31007	VLQ0163J220	COIL 22UH	1	
L31008	VLQ0163J180	COIL 18UH	1	G1C180J00001
L31009	VLQ0163J220	COIL 22UH	1	
L31010-12	VLQ0319K470	COIL 47UH	3	G1C470K00013
L31013	VLQ0163J470	COIL 47UH	1	
L32001	VLQ0319K470	COIL 47UH	1	G1C470K00013
L32002	VLQ0163J680	COIL 68UH	1	
L32003	VLQ0163J560	COIL 56UH	1	
L32004	VLQ0163J680	COIL 68UH	1	
L32005	VLQ0319K470	COIL 47UH	1	G1C470K00013
L32006	VLQ0163J560	COIL 56UH	1	
L33001-06	VLQ0319K470	COIL 47UH	6	G1C470K00013
L35001,02	VLQ0319K470	COIL 47UH	2	G1C470K00013
L36001,02	VLQ0319K100	COIL 10UH	2	G1C100K00023
P30001	K1KA22A00021	CONNECTOR (MALE)	1	
P30002	VJP3518D010	CONNECTOR (FEMALE)	1	
P30003	VJP3440A024	CONNECTOR (MALE)	1	K1KA24A00022
P30004	K1KBE0A00012	CONNECTOR (FEMALE)	1	
P30005	K1KAA0A00105	CONNECTOR (MALE)	1	
P30101	VJS3365B009	CONNECTOR (FEMALE)	1	K1FB209B0009
P36001	K1FA108A0003	CONNECTOR (MALE)	1	
Q30101	2SD601A-R	TRANSISTOR	1	
Q30201,02	2SD601A-R	TRANSISTOR	2	
Q30203	2SB0709ALL	TRANSISTOR	1	
Q30204-06	2SD601A-R	TRANSISTOR	3	
Q31001,02	2SD601A-R	TRANSISTOR	2	
Q31003	2SB0709ALL	TRANSISTOR	1	
Q31004	2SD601A-R	TRANSISTOR	1	
Q31005	2SB0709ALL	TRANSISTOR	1	
Q31006	2SD601A-R	TRANSISTOR	1	
Q32001	2SB0709ALL	TRANSISTOR	1	
Q32002	2SD601A-R	TRANSISTOR	1	
Q32003	2SB0709ALL	TRANSISTOR	1	
Q32004	2SD601A-R	TRANSISTOR	1	
Q32005	2SB0709ALL	TRANSISTOR	1	
Q32006-09	2SD601A-R	TRANSISTOR	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q32010	2SB0709ALL	TRANSISTOR	1	
Q32011,12	2SD601A-R	TRANSISTOR	2	
Q32013	2SB0709ALL	TRANSISTOR	1	
Q32014-18	2SD601A-R	TRANSISTOR	5	
Q32019,20	2SB0709ALL	TRANSISTOR	2	
Q33001	2SD601A-R	TRANSISTOR	1	
Q33002	2SB0709ALL	TRANSISTOR	1	
Q33003	2SD601A-R	TRANSISTOR	1	
Q33004	2SC2295-C	TRANSISTOR	1	
Q33005	2SD601A-R	TRANSISTOR	1	
Q33006	2SB0709ALL	TRANSISTOR	1	
Q33007	2SD601A-R	TRANSISTOR	1	
Q33008	2SC2295-C	TRANSISTOR	1	
Q33009	2SD601A-R	TRANSISTOR	1	
Q33010	2SB0709ALL	TRANSISTOR	1	
Q33011,12	2SC2295-B	TRANSISTOR	2	
Q35006	2SD1328-S	TRANSISTOR	1	
QR30101-03	UNR221300L	TRANSISTOR	3	
QR31001	UNR221300L	TRANSISTOR	1	
QR32001,02	UNR221300L	TRANSISTOR	2	
R30101,02	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	2	
R30103,04	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R30105	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30106-09	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	4	
R30110-12	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
R30113-16	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	4	
R30117,18	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R30119-23	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	5	
R30124	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30125	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R30126	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30127,28	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R30129,30	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R30131,32	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R30133,34	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R30135,36	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R30137,38	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R30139,40	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R30141,42	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R30143,44	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R30145,46	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R30147,48	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R30149,50	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R30151,52	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R30153,54	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R30155	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R30156	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30201,02	ERJ6RED750	M.RESISTOR CH 1/10W 75	2	
R30203	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R30204	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R30205	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R30206	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R30207	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R30208,09	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
R30210,11	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R30213	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R30214	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R30215	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R30216	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R30217	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R30218	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R30219	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30220	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R30221	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R30222	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R30223,24	ERJ6RED750	M.RESISTOR CH 1/10W 75	2	
R30225	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R30226,27	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R30228	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R30229,30	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
R30231,32	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R30233	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R30234	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R30237	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R31001	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R31002	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R31003	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R31005	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R31006	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R31007	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
R31008	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R31009,10	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R31011	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R31012	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R31013	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R31014	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R31015,16	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R31017	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R31018	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R31019	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R31020	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R31021	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R31022	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R31024	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R31025,26	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R31027	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R31028	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R31029	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R31030	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R31031	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R31032,33	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
R31034	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R31035,36	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
R31037	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R31039	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R31042	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R31043	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R31044	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R31045	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R31046	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R31047	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R31048	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R31049	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R31050	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R31051	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R31055	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R32001	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32002	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32003	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R32004	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R32005	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32006	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R32007	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32008	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R32009	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32010,11	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	2	
R32012	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R32013	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32014	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R32015	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R32016	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32017	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R32018	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R32019	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R32020	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32021,22	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	2	
R32023	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R32024	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32025,26	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R32027	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32028	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R32029	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32030	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32031	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R32032	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32033	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32034	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32035	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R32036	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R32037	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32038	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R32039	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32040	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32042	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32043	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R32044	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32045,46	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
R32047	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R32048	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32049	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32050	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32051	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32052	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32053	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32054	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R32055	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32056	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R32057	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R32059	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32060	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32061	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R32062	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32063	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32064	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32065	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32066	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32067	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R32068	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32069	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32070	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R32071	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R32072	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32074	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R32075	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32076	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32077	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R32078	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32079	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R32080	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32081	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R32082	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R32083	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32084,85	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R32086	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R32087	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R32088	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R32089	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R32090	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R32091	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32092	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32093-95	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R32097	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R32098	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32099	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32100	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R32101	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R32103	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R32104	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R32105	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R32106	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R32107	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R32108	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R32109	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R32110	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R32116,17	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R32118	K5H701200001	IC PROTECTOR	1	
R32119,20	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R33001	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R33002	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R33003	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R33004	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R33005	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R33006	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R33007,08	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
R33009,10	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R33013	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R33019	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R33020	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R33021	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R33022	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R33023	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R33024,25	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R33026	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R33027	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R33028	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R33029	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R33032	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R33038	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R33039	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R33040	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R33041	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R33042	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R33043	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R33045	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R33048	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R33055	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R33056	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R33057	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R33058-60	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	3	
R33061-63	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	3	
R35005	ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	
R35006,07	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	2	
R35019	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R35031	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R35032	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R35033,34	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R36001	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R36002-09	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	8	
R36011,12	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2	
R36013-15	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	3	
R36016	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R36017-20	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	4	
R36021	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R36022-28	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	7	
R36029-36	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	8	
R36037	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R36038-45	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	8	
R36046-53	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	8	
R36054	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R36055-62	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	8	
R36069-72	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	4	
R36074	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R36076	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	1	
R36077	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
SW30001	VSS0367-08B	SWITCH	1	
SW36001	VSS0367-08B	SWITCH	1	
TG30001-04	EYF6CU	TEST POINT	4	
TP30001,02	EYF6CU	TEST POINT	2	
TP31001	EYF6CU	TEST POINT	1	
TP31003	EYF6CU	TEST POINT	1	
TP32001-04	EYF6CU	TEST POINT	4	
TP33001-03	EYF6CU	TEST POINT	3	
TP35001,02	EYF6CU	TEST POINT	2	
TP36001-03	EYF6CU	TEST POINT	3	
VC32001	VCV0047	TRIMMER	1	
VR32009	EVM7JGA00B53	V.RESISTOR 5K	1	
X32001	VSX0688	CRYSTAL OSCILLATOR	1	H1C1435B0001
X32002	VSX0689	CRYSTAL OSCILLATOR	1	H1C1775B0002
		MISCELLANEOUS		
	VMS4911	PIN	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	XYN26+F8	SCREW	4	
	VMP7609	S TERMINAL EARTH PLATE	1	FOR VEP13111C
■ E3	VEP10106A	FRONT P.C.BOARD	1	(RTL)
C201-08	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	8	
D201	HLMP1790S02	LED	1	B3AAA0000298
D202-04	MA152WK	DIODE	3	
D205,06	HLMP1790S02	LED	2	B3AAA0000298
D208,09	MA152WK	DIODE	2	
D210	HLMP1790S02	LED	1	B3AAA0000298
D211	MA152WK	DIODE	1	
IC201	C0JBAN000160	IC	1	
IC202	TLCX541F	IC	1	
IC203,04	TVHT574FT	IC	2	
L201,02	VLP0328A102	FERRITE CORE	2	
P201	530481410	CONNECTOR (MALE)	1	
P202	K1KA07B00017	CONNECTOR (MALE)	1	
QR201-05	UN2212	TRANSISTOR-RESISTOR	5	UNR2212
R201-03	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R204,05	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	2	
R206	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R207	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R208	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R209	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
R210	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R211	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R212	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
⚠ SW201-09	K0H1BA000301	SWITCH	9	
⚠ SW211	K0H1BA000301	SWITCH	1	
		MISCELLANEOUS		
	VGU9106ZH	OPERATION BUTTON	10	
	VMX2147	LED SPACER 6	4	
■ E4	VEP11103A	AC SW P.C.BOARD	1	(RTL)
P101,02	VJP3878	CONNECTOR (MALE)	2	K1KA02B00137
⚠ SW101	K0ADKF000003	POWER SWITCH	1	
		MISCELLANEOUS		
	QGUG1040AA	POWER SWITCH BUTTON	1	
■ E5	VEP10111A	POWER LED P.C.BOARD	1	(RTL)
D701	HLMP1790S02	LED	1	B3AAA0000298
P701	K1KA03B00032	CONNECTOR (MALE)	1	
		MISCELLANEOUS		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VMX2147	LED SPACER 6	1	
■ E6	VEP10107A	VR P.C.BOARD	1	(RTL)
C301-05	F1H1H104A783	C.CAPACITOR CH 50V 0.1U	5	
C306-13	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	8	
P301	K1KA15A00022	CONNECTOR (MALE)	1	
R301-04	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	4	D0GD472JA003
R305-12	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	8	D0YDR0000005
R313-20	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	8	
VR301-04	K9AA015B0043	V.RESISTOR 100K	4	
■ E7	VEP10108A	LED P.C.BOARD	1	(RTL)
D401-04	B3ADA0000065	DIODE	4	
P401	K1KA07B00017	CONNECTOR (MALE)	1	
QR401-04	UN2212	TRANSISTOR-RESISTOR	4	UNR2212
R401-04	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	4	
		MISCELLANEOUS		
	VMX2147	LED SPACER 6	4	
■ E8	VEP11108A	DC DC P.C.BOARD	1	(RTL)
C1401	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C1403	ECST1VX335Z	T.CAPACITOR CH 35V 3.3U	1	
C1404	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C1405	ECST1VX335Z	T.CAPACITOR CH 35V 3.3U	1	
C1406	ECA1CHG221	E.CAPACITOR 16V 220U	1	
C1408	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1409	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1410	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C1411	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1412	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C1413,14	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	2	
C1415	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C1416	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1501	ECST1VX335Z	T.CAPACITOR CH 35V 3.3U	1	
C1502	ECST1VX225Z	T.CAPACITOR CH 35V 2.2U	1	
C1505	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1506	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C1508	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	F1J1H121A025
C1509,10	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C1511	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	F1J1H561A025
C1513	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1514	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C1517	VCEA1DSP470	E.CAPACITOR 20V 47U	1	
C1518	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1519,20	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C1523	ECA1AHG331	E.CAPACITOR 10V 330U	1	
C1524	VCEA1ASP101	E.CAPACITOR 10V 100U	1	
C1525,26	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1528,29	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	2	
C1532	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1535	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1536	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	
C1537,38	ECA1AHG331	E.CAPACITOR 10V 330U	2	
C1601	ECST1VX335Z	T.CAPACITOR CH 35V 3.3U	1	
C1602	ECST1VX225Z	T.CAPACITOR CH 35V 2.2U	1	
C1605	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1606	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C1608	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C1609,10	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C1611	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	F1J1H561A025
C1613	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1615,16	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	2	
C1617	F2D1D2200005	E.CAPACITOR 20V 22U	1	
C1618	VCEA1DSP470	E.CAPACITOR 20V 47U	1	
C1619,20	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C1622	F2D1C1010003	E.CAPACITOR 20V 22U	1	
C1625	VCEA1ASP101	E.CAPACITOR 10V 100U	1	
C1626,27	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	2	
C1629,30	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	2	
C1633	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1636	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1637	ECUX1A684KBV	C.CAPACITOR CH 10V 0.68U	1	
D1401	MA8051-H	DIODE	1	
D1402	MA8062-MH	DIODE	1	
D1403	MA142K	DIODE	1	
D1405	MA720	DIODE	1	
D1407	MA142K	DIODE	1	
D1408	MA142WA	DIODE	1	
D1501	MA142WK	DIODE	1	
D1502,03	DE5SC4M-4061	DIODE	2	B0JDRE000001
D1504	MA8062-MH	DIODE	1	
D1505	MA142K	DIODE	1	
D1506	MA8062-MH	DIODE	1	
D1507	MA142K	DIODE	1	
D1508	MA142WA	DIODE	1	
D1601	MA142WK	DIODE	1	
D1602,03	DE5SC4M-4061	DIODE	2	B0JDRE000001
D1604	MA8062-MH	DIODE	1	
D1605	MA142K	DIODE	1	
D1606	MA8062-MH	DIODE	1	
D1607	MA142K	DIODE	1	
D1608	MA142WA	DIODE	1	
IC1401	C0BBBA000019	IC	1	
IC1501	BA9743AFV	IC	1	C0DBAZC00010
IC1601	BA9743AFV	IC	1	C0DBAZC00010
JP1401,02	VJR1008	EARTH LUG	2	
L1401,02	VLQ0441K220	COIL 22UH	2	
L1501,02	J0JBC0000019	FILTER	2	
L1503	VLQ0441K1R0	COIL 1.0UH	1	
L1504	VLQ0859M151	COIL 150UH	1	
L1505	VLQ0859M220	COIL 22UH	1	
L1506,07	VLQ0916N2R5	COIL 2.5UH	2	
L1601,02	J0JBC0000019	FILTER	2	
L1603,04	VLQ0441K1R0	COIL 1.0UH	2	
L1605	VLQ0859M220	COIL 22UH	1	
L1606	VLQ0859M330	COIL 33UH	1	
L1607,08	VLQ0916N2R5	COIL 2.5UH	2	
P1403	K1KA26A00072	CONNECTOR (MALE)	1	
P1404	VJP3926A016	CONNECTOR (MALE)	1	K1KA16A00146
Q1501	XN4501	TRANSISTOR-RESISTOR	1	
Q1502	2SD1820A-R	TRANSISTOR	1	
Q1503	2SB1219A-R	TRANSISTOR	1	
Q1504	2SD1820A-R	TRANSISTOR	1	
Q1505	2SB1219A-R	TRANSISTOR	1	
Q1506,07	XN0440100L	TRANSISTOR	2	
Q1508	2SJ279S	TRANSISTOR	1	B1DGDG000002
Q1509	2SJ214S	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q1601	XN4501	TRANSISTOR-RESISTOR	1	
Q1602	2SD1820A-R	TRANSISTOR	1	
Q1603	2SB1219A-R	TRANSISTOR	1	
Q1604	2SD1820A-R	TRANSISTOR	1	
Q1605	2SB1219A-R	TRANSISTOR	1	
Q1606,07	XN0440100L	TRANSISTOR	2	
Q1608	2SJ214S	TRANSISTOR	1	
Q1609	2SJ279S	TRANSISTOR	1	B1DGDG000002
QR1401	UNR521100L	TRANSISTOR	1	
QR1402	UNR511300L	TRANSISTOR	1	
QR1403,04	UNR521100L	TRANSISTOR	2	
QR1501,02	UNR511200L	TRANSISTOR	2	
QR1503,04	UNR521100L	TRANSISTOR	2	
QR1601,02	UNR511200L	TRANSISTOR	2	
QR1603,04	UNR521100L	TRANSISTOR	2	
R1401	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R1402	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R1403	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
R1404	ERJ3RBD243	M.RESISTOR CH 1/16W 24K	1	
R1405	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R1406	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1407-10	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R1411	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R1412	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1413	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1415	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1416	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1417	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1418	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R1419-21	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	3	
R1501-04	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	4	
R1505	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1506	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R1507	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1508	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R1509,10	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R1511	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1513	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1514	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R1515	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R1516	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R1517,18	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R1519	ERJ3RBD162	M.RESISTOR CH 1/16W 1.6K	1	
R1520	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1521	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R1522	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R1523	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1524	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R1525	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1526	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	D0GD221JA003
R1527,28	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R1529	ERJL14KJ50M	M.RESISTOR CH 1/4W 5	1	
R1530	VRE0221H50M	M.RESISTOR	1	
R1531	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R1532	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1533	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R1534	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1535	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1536	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R1537	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1538	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R1539	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1541	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1543	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1544	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1545	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1601-04	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	4	
R1605	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1606	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R1607	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1608	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R1609,10	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R1611	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	

Components identified with the mark ⚠ have the special characteristic for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1613	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1614	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R1615	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R1616	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
R1617	ERJ3RBD162	M.RESISTOR CH 1/16W 1.6K	1	
R1618	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R1619	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R1620	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1621	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R1622	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R1623	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1624	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R1625	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1626	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	D0GD221JA003
R1627,28	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R1629	VRE0221H33M	M.RESISTOR	1	
R1630	VRE0221H50M	M.RESISTOR	1	
R1631	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R1632	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1633	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R1634	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1635	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1636	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R1637	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1638	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1639	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R1641	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1643	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1644	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
TP1401-06	EYF6CU	TEST POINT	6	
■ E9	VEP11104A	POWER MAIN P.C.BOARD	1	(RTL)
⚠ C1001	ECQU2A224ML	P.CAPACITOR 100V 0.22U	1	
⚠ C1002,03	F1BAH101A001	C.CAPACITOR 100P	2	
⚠ C1004	ECQU2A224ML	P.CAPACITOR 100V 0.22U	1	
⚠ C1005	F1BAH101A001	C.CAPACITOR 100P	1	
⚠ C1006	ECQU2A224ML	P.CAPACITOR 100V 0.22U	1	
C1007	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1008	EEUEB1H221B	E.CAPACITOR 50V 220U	1	
C1009	ECQE2W225KC	P.CAPACITOR 450V 2.2U	1	
C1010	VCK0106K101	C.CAPACITOR 100P	1	
C1012	ECEC2WB151DB	E.CAPACITOR 450V 150U	1	
C1013	ECQF6222JZH	P.CAPACITOR 630V 2200P	1	
C1101	VCK0106K221	C.CAPACITOR 220P	1	
C1102	ECQE6473KF	C.CAPACITOR 1000P	1	
C1103	EEUEB1H470B	E.CAPACITOR 50V 47U	1	
C1104,05	ECQE6473KF	C.CAPACITOR 1000P	2	
C1106	EEUFC1E102	E.CAPACITOR 25V 1000U	1	
C1108	ECQV1H684JL	P.CAPACITOR 50V 0.68U	1	
C1109	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1110	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C1111	ECA1EHG331	E.CAPACITOR 25V 330U	1	
⚠ C1112	F1BAH101A001	C.CAPACITOR 100P	1	
C1113-15	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	3	
D1001	RBV606	DIODE	1	
D1002-04	SFPL-52	DIODE	3	
D1005	FML-G26S	DIODE	1	
D1006,07	MA3200-M	DIODE	2	
D1101	MA3270-M	DIODE	1	
D1102	AP01C	DIODE	1	B0HADV000010
D1103	SFPL-52	DIODE	1	
D1104	AP01C	DIODE	1	B0HADV000010
⚠ D1105	RC3B2	DIODE	1	
D1106	SFPL-52	DIODE	1	
D1107	D20LC20U	DIODE	1	B0HBSM000021
D1108	MA3200-M	DIODE	1	
D1110	MA152K	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1111-13	SFPL-52	DIODE	3	
⚠ F1001,02	VSF0106C25H	FUSE	2	
⚠ F1003	VSF0246	FUSE	1	
FH1001-04	EYF52BC	FUSE HOLDER	4	
⚠ J1102	VRT0152500	SWITCH	1	
⚠ J1103	VRT0148050	THERMISTOR	1	D4ZZ00000006
JP1001,02	VJR1008	EARTH LUG	2	
JP1101	VJR1008	EARTH LUG	1	
⚠ L1001	ELF18D609F	FILTER	1	
⚠ L1002,03	ELF21N013A	FILTER	2	
L1004	G0A901K00001	COIL 900UH	1	
L1009,10	VLP0336	FERRITE CORE	2	
L1101,02	VLP0083	COIL	2	J0JKB0000011
L1106	G0A700L00001	COIL	1	
L1108,09	VLP0336	FERRITE CORE	2	
P1001	VJP2073	CONNECTOR (MALE)	1	K1KA02A00104
P1002	VJP3042G012W	CONNECTOR (MALE) 12P	1	K1KA12A00136
P1101	VJP3042G010W	CONNECTOR (MALE)	1	K1KA10A00204
P1102,03	VJP3042G003W	CONNECTOR (MALE)	2	K1KA03A00157
P1105	VJP3926A010	CONNECTOR (MALE)	1	
P1106	K1KA03A00017	CONNECTOR (MALE)	1	
P1107	VJP3926A012	CONNECTOR (MALE)	1	K1KA12A00121
Q1001	TM1661S-L	DIODE	1	
Q1002	B1DEGR000013	TRANSISTOR	1	
Q1101	B1DEFV000001	TRANSISTOR	1	
Q1102	2SD601A-R	TRANSISTOR	1	
Q1103,04	2SJ280L	TRANSISTOR	2	B1DGJG000002
QR1101,02	UN2212	TRANSISTOR-RESISTOR	2	UNR2212
⚠ R1001	ERC12AGM334C	S.RESISTOR 1/2W 33K	1	
⚠ R1002	ERU5TEJ100	F.RESISTOR 5W 10	1	
R1003	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1004,05	ERG2SJ121	M.RESISTOR 2W 120	2	
R1007,08	ERJ12YJ104	M.RESISTOR CH 1/2W 100K	2	
R1010-13	ERJ12YJ104	M.RESISTOR CH 1/2W 100K	4	
R1014	ERJ12YJ3R3	M.RESISTOR CH 1/2W 3.3	1	
R1015	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1016	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1017	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R1018	ERX2SJR22	M.RESISTOR 2W 0.22	1	
R1019	ERG2SJ220	M.RESISTOR 2W 22	1	
R1020	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1	
R1021	ERJ14YJ220	M.RESISTOR CH 1/4W 22	1	
R1022	ERDS2FJ472	C.RESISTOR 1/4W 4.7K	1	
R1024-26	ERJ12NF1503	M.RESISTOR CH 1/2W 150K	3	
R1027-32	ERJ12YJ224	M.RESISTOR CH 1/2W 220K	6	
R1033,34	ERJ12YJ104	M.RESISTOR CH 1/2W 100K	2	
R1035,36	ERJ14YJ474	M.RESISTOR CH 1/4W 470K	2	
R1101,02	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	2	
R1103	ERJ12YJ104	M.RESISTOR CH 1/2W 100K	1	
R1104	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	1	
R1105	ERJ12YJ104	M.RESISTOR CH 1/2W 100K	1	
R1106	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R1107	ERW1PKR33	W.RESISTOR 1W 0.33	1	
R1108	ERJ12YJ220	M.RESISTOR CH 1/2W 22	1	
R1109	ERJ12YJ270	M.RESISTOR CH 1/2W 270	1	
R1110	ERG2SJ180	M.RESISTOR 2W 18	1	
R1111,12	ERG3SJ683	M.RESISTOR 3W 68K	2	
R1113	ERJ12YJ3R3	M.RESISTOR CH 1/2W 3.3	1	
R1114	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
R1115	ERG2SJ220	M.RESISTOR 2W 22	1	
R1116	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1117	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1118	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1119	ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1	D0GD823JA003
R1120	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R1121	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	

Components identified with the mark ⚠ have the special characteristic for safety.
When replacing any of these components, use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1122	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R1123,24	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	2	
R1125	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1126	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1127,28	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	2	
R1131	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R1133	ERJ12YJ104	M.RESISTOR CH 1/2W 100K	1	
⚠ T1101	G4D2C0000006	SWITCHING TRANSFORMER	1	
⚠ TH1101	VRT0142	THERMISTOR	1	D4DDB3310005
		MISCELLANEOUS		
⚠	VMZ0429	FUSE COVER	2	
⚠	VMZ1664	FILTER COVER	1	
⚠	VMZ1686	CAPACITOR COVER	4	
⚠	VWZ0234	THERMAL CONDUCTIVE CASE	1	
⚠	VWZ0237	THERMAL CONDUCTIVE TUBE	1	
⚠	VMZ2187	INSULATION COVER	1	
	VMP5282	TRANSISTOR CLIP	1	
	VMS7084	SPACER	4	
	VMS7109	SPACER	2	
	XYN3+F8	SCREW	4	
	VSC5349	HEAT SINK S	1	
	XTV3+6J	SCREW	1	
	VSC5348	HEAT SINK L	1	
	XYN3+F6	SCREW	7	
	XYN3+F10	SCREW	1	
■ E10	VEP11105A	POWER SUB 1 P.C.BOARD	1	(RTL)
C1201	EEUEB1H100S	E.CAPACITOR 50V 10U	1	
C1202	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1203	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C1204	ECQV1H684JL	P.CAPACITOR 50V 0.68U	1	
C1205	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C1206	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1207	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C1208	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1210	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1211	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C1212	EEUEB1H1R0S	E.CAPACITOR 50V 1U	1	
C1213	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C1214	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C1215	ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C1216,17	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	2	
C1218	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C1219	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1220	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C1222,23	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	F1J1H103A010
C1224	EEUEB1H1R0S	E.CAPACITOR 50V 1U	1	
C1228	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
D1201,02	MA3200-M	DIODE	2	
D1203	MA3120-M	DIODE	1	
D1204	MA152K	DIODE	1	
D1205	MA152WA	DIODE	1	
D1206	MA3240-H	DIODE	1	
D1207	MA3051-M	DIODE	1	MAZ30510ML
D1208,09	MA3068-M	DIODE	2	
D1210	MA152K	DIODE	1	
D1212	MA720	DIODE	1	
D1213	SFPB-76V	DIODE	1	
IC1201	M51951BL	IC	1	C0EAH0000030
IC1202	MC33262P	IC	1	C0DAZZZ00013
IC1203	FA5310BP	IC	1	
P1201	VJS3042F012W	CONNECTOR (FEMALE) 12P	1	K1KB12B00030

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P1202	VJS3042F010W	CONNECTOR (FEMALE)	1	K1KB10B00032
Q1201	XN1501	TRANSISTOR-RESISTOR	1	
Q1202	2SJ278	TRANSISTOR	1	
QR1201	UNR211200L	TRANSISTOR	1	
QR1202	UN2111	TRANSISTOR-RESISTOR	1	
QR1203,04	UNR221300L	TRANSISTOR	2	
QR1205	UN2113	TRANSISTOR-RESISTOR	1	
QR1206	UNR221300L	TRANSISTOR	1	
R1201	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R1202	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R1203	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R1204	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R1205	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R1206	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R1208	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R1209	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R1210	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R1211	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R1212	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1213	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R1214	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R1215	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	D0GD225JA003
R1216	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
R1217	ERJ6RED470	M.RESISTOR CH 1/10W 47	1	
R1218	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R1219	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1	
R1220	ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R1221	ERJ6RBD241	M.RESISTOR CH 1/10W 240	1	
R1222	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1224	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R1226	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
■ E11	VEP11106A	POWER SUB 2 P.C.BOARD	1	(RTL)
C1302	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C1305	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
IC1301	AN1431M	IC	1	
P1301,02	VJS3042B003W	CONNECTOR (FEMALE)	2	K1KB03B00007
⚠ PC1301,02	PC111LY1	PHOTO COUPLER	2	
R1301	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	D0GD221JA003
R1302	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1303	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R1305	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1306	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R1307	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
■ E12	VEP11109A	DC DC SUB P.C.BOARD	1	(RTL)
C1701-03	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	3	
C1704	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1705,06	ECST1VX335Z	T.CAPACITOR CH 35V 3.3U	2	
C1709	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C1711	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1712	ECUX1H223KBN	C.CAPACITOR CH 50V 0.22U	1	
C1713,14	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C1715	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C1718	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1719	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1720	F2D1D2200005	E.CAPACITOR 20V 22U	1	
C1721,22	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C1725,26	ECA1AHG331	E.CAPACITOR 10V 330U	2	
C1727,28	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	2	
C1729,30	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	2	
C1731	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1733-37	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	5	
C1802	ECST1VX335Z	T.CAPACITOR CH 35V 3.3U	1	
C1805	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C1807	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1808	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C1809,10	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C1811	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C1812	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1814	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C1815	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1816	VCEA1DSP470	E.CAPACITOR 20V 47U	1	
C1817,18	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C1821	ECA1AHG331	E.CAPACITOR 10V 330U	1	
C1822	F2D1C1010003	E.CAPACITOR 20V 22U	1	
C1823,24	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	2	
C1825	ERJ14YJ391	M.RESISTOR CH 1/4W 390	1	
C1827	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1828,29	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	2	
D1701	MA142WK	DIODE	1	
D1702	DE5SC4M-4061	DIODE	1	B0JDRE000001
D1703	NSQ03A04	DIODE	1	B0JCPE000013
D1704	MA8062-MH	DIODE	1	
D1705	MA142K	DIODE	1	
D1706	MA8027-H	DIODE	1	
D1707,08	MA142K	DIODE	2	
D1710	SFPB-76V	DIODE	1	
D1801	MA142WK	DIODE	1	
D1802	SFPB-76V	DIODE	1	
D1803	DE5SC4M-4061	DIODE	1	B0JDRE000001
D1804	MAZ81000KL	DIODE	1	
D1805,06	MA142K	DIODE	2	
D1807	MAZ81000KL	DIODE	1	
D1808,09	MA142K	DIODE	2	
IC1701	BA9743AFV	IC	1	C0DBAZC00010
IC1801	BA9743AFV	IC	1	C0DBAZC00010
JP1701,02	VJR1008	EARTH LUG	2	
L1701	J0JBC0000019	FILTER	1	
L1702	VLQ0441K4R7	COIL 4.7UH	1	
L1703	VLQ0859M221	COIL 220U	1	
L1704,05	J0JKC0000009	FILTER	2	
L1706	VLQ0859M221	COIL 220U	1	
L1707,08	VLQ0916N2R5	COIL 2.5UH	2	
L1709	J0JBC0000019	FILTER	1	
L1801,02	J0JBC0000019	FILTER	2	
L1803	VLQ0441K4R7	COIL 4.7UH	1	
L1804	VLQ0859M221	COIL 220U	1	
L1805	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
L1806	VLQ0859M220	COIL 22UH	1	
L1807	J0JKC0000009	FILTER	1	
L1808	VLQ0441K220	COIL 22UH	1	
L1809	VLQ0916N2R5	COIL 2.5UH	1	
P1701	VJP3926B016	CONNECTOR (MALE)	1	K1KA16B00049
P1702	VJP3926B012	CONNECTOR (MALE)	1	K1KA12B00074
Q1701	XN4501	TRANSISTOR-RESISTOR	1	
Q1702	2SD1820A-R	TRANSISTOR	1	
Q1703	2SB1219A-R	TRANSISTOR	1	
Q1704	2SD1820A-R	TRANSISTOR	1	
Q1705	2SB1219A-R	TRANSISTOR	1	
Q1706,07	XN0440100L	TRANSISTOR	2	
Q1708,09	2SJ279S	TRANSISTOR	2	B1DGDG000002
Q1710-12	2SD1819ALL	TRANSISTOR	3	
Q1801	XN4501	TRANSISTOR-RESISTOR	1	
Q1802	2SD1820A-R	TRANSISTOR	1	

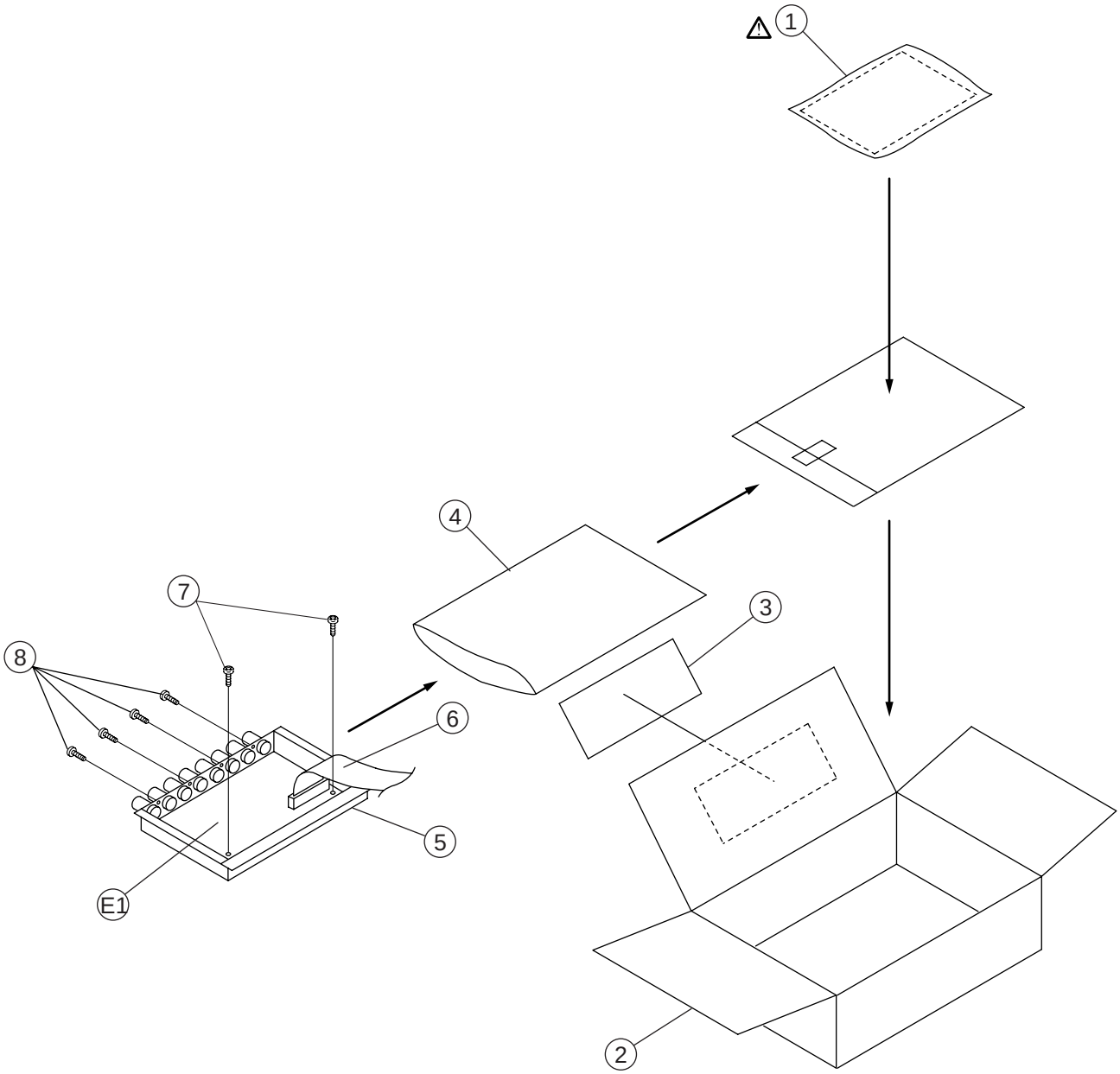
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q1803	2SB1219A-R	TRANSISTOR	1	
Q1804	2SD1820A-R	TRANSISTOR	1	
Q1805	2SB1219A-R	TRANSISTOR	1	
Q1806,07	XN0440100L	TRANSISTOR	2	
Q1808,09	2SJ279S	TRANSISTOR	2	B1DGDG000002
Q1810,11	2SD1819ALL	TRANSISTOR	2	
QR1701,02	UNR511200L	TRANSISTOR	2	
QR1703,04	UNR521100L	TRANSISTOR	2	
QR1705	UNR511300L	TRANSISTOR	1	
QR1801,02	UNR511200L	TRANSISTOR	2	
QR1803,04	UNR521100L	TRANSISTOR	2	
QR1805,06	UNR511300L	TRANSISTOR	2	
R1701-04	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R1705	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R1706-09	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	4	
R1710	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R1711	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R1712	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R1713	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R1714,15	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R1716	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1718	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1719	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R1720	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R1722	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
R1723	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R1725	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R1727	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1728	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R1729	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1730	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R1732	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1733	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	D0GD221JA003
R1734,35	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R1736,37	ERJL14KJ50M	M.RESISTOR CH 1/4W 5	2	
R1738	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R1739	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1740	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R1741	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1742	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1743	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R1744	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1745	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R1748	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1749	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R1750	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R1751-54	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R1755-59	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	5	
R1761	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R1763,64	ERJ14YJ470	M.RESISTOR CH 1/4W 47	2	
R1801,02	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	2	
R1803,04	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R1805	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1806	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R1807	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1808	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R1809,10	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R1811	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1813	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1814	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R1815	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R1816	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
R1817	ERJ3RBD242	M.RESISTOR CH 1/16W 2.4K	1	
R1818,19	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	2	
R1820,21	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R1822	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1823	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	1	
R1824	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1825	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	1	
R1827	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1828	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	D0GD221JA003
R1829,30	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R1831,32	ERJL14KJ50M	M.RESISTOR CH 1/4W 5	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1833,34	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R1835,36	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R1837	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1838	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R1839	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1840	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R1843-46	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
TP1701-05	EYF6CU	TEST POINT	5	
VR1701,02	EVM7JGA00B23	V.RESISTOR 2K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA100P PACKING PARTS ASSEMBLY



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA100P PACKING PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ 1	VQT9922	OPERATING INSTRUCTIONS	1	
2	VPG6296	PACKING CASE	1	
3	VQL9822	PACKING LABEL	1	
4	VPF0535	POLYETHYLENE BAG	1	
5	VMP7158	RGB CASE	1	
6	VEE0Q44	CABLE	1	
7	XYN3+F6	SCREW	2	
8	XTB3+8GFZ	SCREW	4	
E1	VEP13113A	ANALOG P.C.BOARD	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA100P ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP13113A	ANALOG P.C.BOARD	1	(RTL)
■ E1	VEP13113A	ANALOG P.C.BOARD	1	(RTL)
C2001,02	EEVHB1C470P	E.CAPACITOR 16V 47U	2	
C2003,04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C2005	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C2101	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C2102	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C2103	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C2104	EEVHB1A330	E.CAPACITOR 10V 33U	1	
C2105	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C2107-12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C2113	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C2114	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C2115	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C2116	ECJ1VC1H560J	C.CAPACITOR CH 50V 560P	1	
C2117	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C2201,02	EEVHB1A330	E.CAPACITOR 10V 33U	2	
C2203	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C2204	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C2205-07	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C2209	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C2210-13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C2214	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C2215	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C2216	ECJ1VC1H560J	C.CAPACITOR CH 50V 560P	1	
C2217	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C2218	ECJ1VC1H560J	C.CAPACITOR CH 50V 560P	1	
C2219	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C2220	ECJ1VC1H560J	C.CAPACITOR CH 50V 560P	1	
C2221	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C2301,02	EEVHB1A330	E.CAPACITOR 10V 33U	2	
C2303	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C2304	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C2305,06	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C2308	EEVHP1C220	E.CAPACITOR 16V 22U	1	
C2309-13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C2314	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C2315	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C2316	ECJ1VC1H560J	C.CAPACITOR CH 50V 560P	1	
C2317	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C2318	ECJ1VC1H560J	C.CAPACITOR CH 50V 560P	1	
C2319	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C2320	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C2321	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
IC2101	C0JBAS000075	IC	1	
IC2102	AD8047AR	IC	1	
IC2103	C0JBAS000075	IC	1	
IC2201-04	C0JBAS000075	IC	4	
IC2205	AD8047AR	IC	1	
IC2301-04	C0JBAS000075	IC	4	
IC2305	AD8047AR	IC	1	
J2001	K1QBB2AB0006	IC	1	
J2101	K1QBB2AB0006	IC	1	
J2201	K1QBB2AB0006	IC	1	
J2301	K1QBB2AB0006	IC	1	
L2001,02	VLQ0319K470	COIL 47UH	2	G1C470K00013
L2101,02	VLQ0319K470	COIL 47UH	2	G1C470K00013
L2201,02	VLQ0319K470	COIL 47UH	2	G1C470K00013
L2301,02	VLQ0319K470	COIL 47UH	2	G1C470K00013

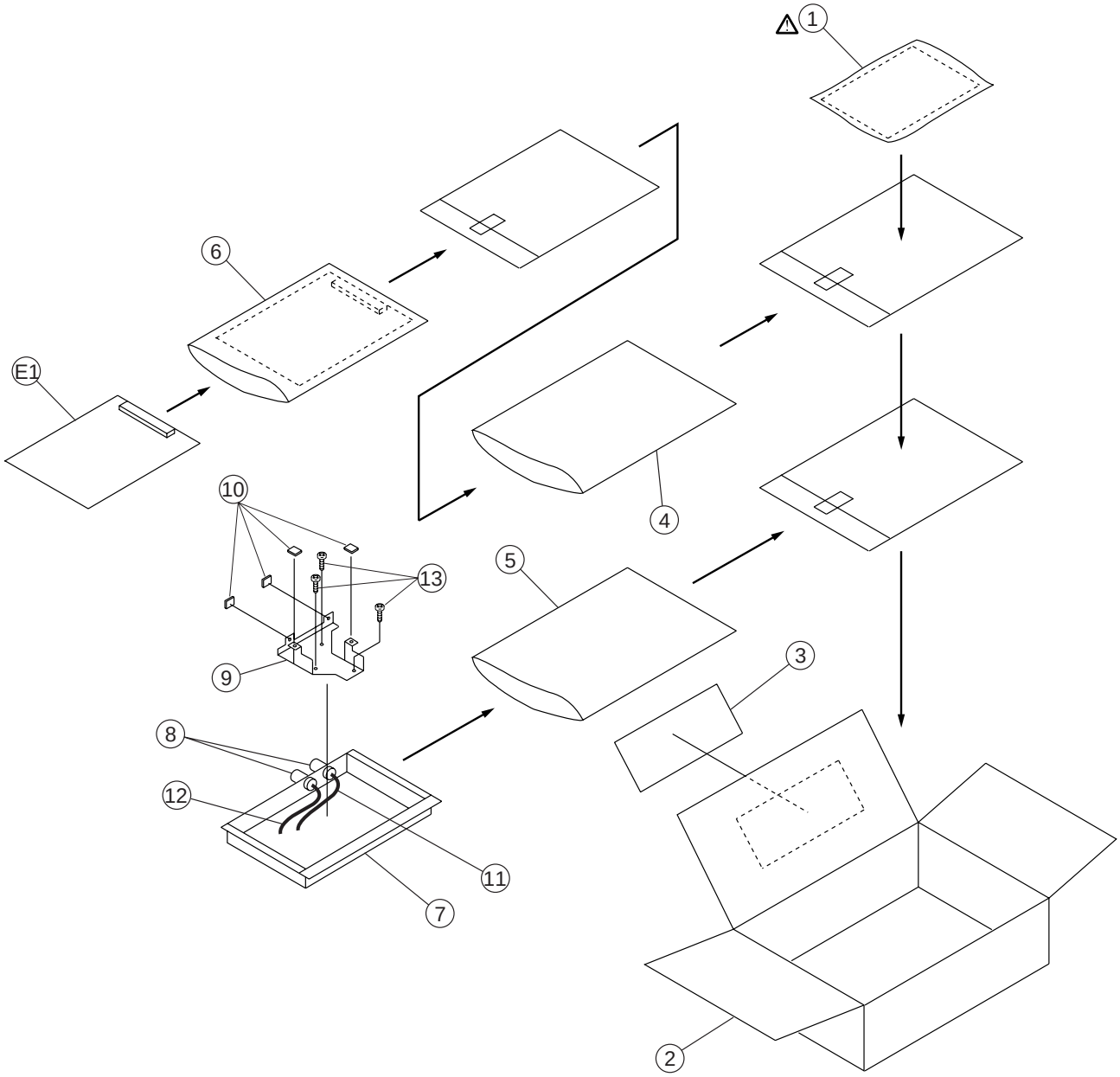
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P2001	VJP3440A024	CONNECTOR (MALE)	1	K1KA24A00022
Q2001	XN0460100L	TRANSISTOR-RESISTOR	1	
Q2101	2SC2295-C	TRANSISTOR	1	
Q2102	2SA10220BL	TRANSISTOR	1	
Q2103	2SC2295-C	TRANSISTOR	1	
Q2104,05	2SA10220BL	TRANSISTOR	2	
Q2106	2SC2295-C	TRANSISTOR	1	
Q2107	2SA10220BL	TRANSISTOR	1	
Q2108	2SC2295-C	TRANSISTOR	1	
Q2109,10	2SA10220BL	TRANSISTOR	2	
Q2111	2SC3757-R	TRANSISTOR	1	
Q2112	2SC2295-C	TRANSISTOR	1	
Q2201	2SC2295-C	TRANSISTOR	1	
Q2202	2SA10220BL	TRANSISTOR	1	
Q2203	2SC2295-C	TRANSISTOR	1	
Q2204,05	2SA10220BL	TRANSISTOR	2	
Q2206	2SC2295-C	TRANSISTOR	1	
Q2207	2SA10220BL	TRANSISTOR	1	
Q2208	2SC2295-C	TRANSISTOR	1	
Q2209	2SA10220BL	TRANSISTOR	1	
Q2210	2SC2295-C	TRANSISTOR	1	
Q2211,12	2SA10220BL	TRANSISTOR	2	
Q2213	2SC2295-C	TRANSISTOR	1	
Q2214-16	2SA10220BL	TRANSISTOR	3	
Q2217-19	2SC2295-C	TRANSISTOR	3	
Q2301	2SC2295-C	TRANSISTOR	1	
Q2302	2SA10220BL	TRANSISTOR	1	
Q2303	2SC2295-C	TRANSISTOR	1	
Q2304,05	2SA10220BL	TRANSISTOR	2	
Q2306	2SC2295-C	TRANSISTOR	1	
Q2307	2SA10220BL	TRANSISTOR	1	
Q2308	2SC2295-C	TRANSISTOR	1	
Q2309	2SA10220BL	TRANSISTOR	1	
Q2310	2SC2295-C	TRANSISTOR	1	
Q2311,12	2SA10220BL	TRANSISTOR	2	
Q2313	2SC2295-C	TRANSISTOR	1	
Q2314	2SA10220BL	TRANSISTOR	1	
Q2315	2SC2295-C	TRANSISTOR	1	
Q2316,17	2SA10220BL	TRANSISTOR	2	
Q2318,19	2SC2295-C	TRANSISTOR	2	
QR2201	UNR221300L	TRANSISTOR	1	
QR2301	UNR221300L	TRANSISTOR	1	
R2001	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
R2002	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2003	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R2004	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R2005	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R2006	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R2007	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2101	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
R2102	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2103	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R2104	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R2105	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2106	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2107	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2108	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2110	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R2111,12	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R2113	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2114	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2117	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2118	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2119	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2121	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R2122,23	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R2124	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2125	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2126	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2127	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2128	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2129	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R2130	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2132	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R2133	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2134	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R2135	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R2136	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R2137	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2138	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2139	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R2140	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R2201	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
R2202	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2203	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R2204	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R2205	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R2206	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2207	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2208	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2210	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R2211,12	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R2213	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2214	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2215	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2216	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2218	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R2219,20	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	2	
R2221	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2222	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2223	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2224	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2225	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2226	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2228	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R2229,30	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R2231	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2232	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2233	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2234	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2236	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R2237	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R2239	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R2240	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2241	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2242	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2243	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2245	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2246	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R2247	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2248	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2249,50	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
R2251,52	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R2253	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2254	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R2257,58	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R2301	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
R2302	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2303	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R2304	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R2305	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R2306	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2307	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2308	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2310	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R2311,12	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R2313	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2314	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2315	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2316	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2318	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R2319,20	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	2	
R2321	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2322	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2323	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2324	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2325	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2326	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2328	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R2329,30	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R2331	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2332	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2333	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2334	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2336	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R2337	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R2339	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R2340	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2341,42	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	2	
R2343,44	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R2345	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2347	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2348	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R2349	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R2350	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2351	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2352	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R2353	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R2354	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R2357,58	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
TG2201,02	EYF6CU	TEST POINT	2	
TP2101	EYF6CU	TEST POINT	1	
TP2201	EYF6CU	TEST POINT	1	
TP2301	EYF6CU	TEST POINT	1	

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA200P PACKING PARTS ASSEMBLY



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA200P PACKING PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ 1	VQT9923	OPERATING INSTRUCTIONS	1	
2	VPG6296	PACKING CASE	1	
3	VQL9822	PACKING LABEL	1	
4	VPF0462	POLYETHYLENE BAG	1	
5	VPF0535	POLYETHYLENE BAG	1	
6	VPF0536	POLYETYHLENE BAG	1	
7	VMP7160	SDSDI CASE	1	
8	VJS4132	CONNECTOR (FEMALE)	2	K1SMBDBA0001
9	VMP7355	CABLE HOLDER ANGLE	1	
10	VMT1359	CONNECTOR CUSHION	4	
11	VEE0E13100	CABLE	1	
12	VEE0E48100	CABLE	1	
13	XYN3+F6	SCREW	3	
E1	VEP13112A	SDSDI P.C.BOARD	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

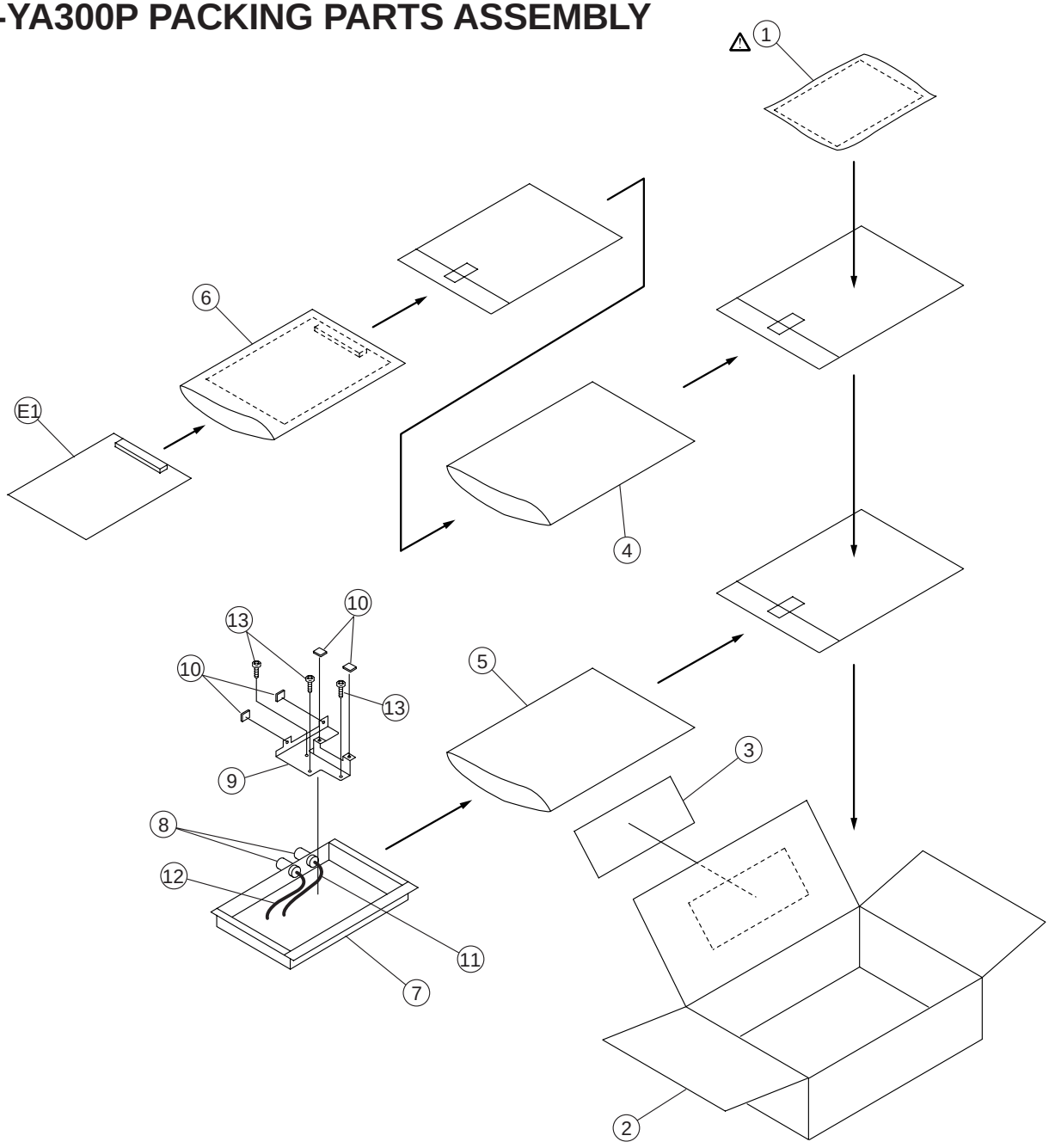
BT-YA200P ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP13112A	SDSDI P.C.BOARD	1	(RTL)
■ E1	VEP13112A	SDSDI P.C.BOARD	1	(RTL)
C4001	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C4002	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4003,04	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C4005	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C4006	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4007	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4008	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4009	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C4010	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C4011	ECUX1H153KBV	C.CAPACITOR CH 50V 0.015U	1	
C4012	ECUX1H060DCV	C.CAPACITOR CH 50V 6P	1	
C4013	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P	1	
C4014-17	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C4018	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4019	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C4020,21	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C4022	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4023	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C4024-26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C4027	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C4028	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4029	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C4030-36	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C4037	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	F1J1C105A083
C4038	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C4039	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	F1J1C105A083
C4040-44	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
D4001	LN1251CAL	DIODE	1	
D4002,03	MA152K	DIODE	2	
FL4001-05	F1J1A105A013	FILTER	5	
IC4001	GS9025-CQM	IC	1	C1AB00000363
IC4002	GS9020-CFV	IC	1	C1AB00000364
IC4003	GS9028-CKA	IC	1	C1AB00000365
IC4004,05	C0JBAF000233	IC	2	
IC4006,07	TVHT541FT	IC	2	
J4001,02	VJP4131	CONNECTOR (MALE)	2	K1QZB1AD0003
L4001	VLQ0426J015	COIL 15UH	1	
L4002,03	VLQ0426J010	COIL 1UH	2	
P1	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
QR4001	UN2214	TRANSISTOR-RESISTOR	1	UNR221400L
R4001	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4002	ERJ3RED750	M.RESISTOR CH 1/16W 75	1	
R4003	ERJ3RED390	M.RESISTOR CH 1/16W 39	1	
R4004,05	ERJ3RED750	M.RESISTOR CH 1/16W 75	2	
R4007	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4008	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4009,10	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	2	
R4011	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R4012	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R4013	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4014-21	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	8	D0GB103JA002
R4022,23	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4024	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4025,26	ERJ3RED510	M.RESISTOR CH 1/16W 51	2	
R4027	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4028	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R4029	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R4030	ERJ6RED560	M.RESISTOR CH 1/10W 56	1	
R4031	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4032-35	ERJ6RED750	M.RESISTOR CH 1/10W 75	4	
R4038	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4039	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
R4040-49	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	10	
R4050	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R4051,52	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
SW4001	VSS0367-08B	SWITCH	1	
TG4003,04	EYF6CU	TEST POINT	2	
TP4001,02	EYF6CU	TEST POINT	2	

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA300P PACKING PARTS ASSEMBLY



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA300P PACKING PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ 1	VQT9924	OPERATING INSTRUCTIONS	1	
2	VPG6296	PACKING CASE	1	
3	VQL9822	PACKING LABEL	1	
4	VPF0462	POLYETHYLENE BAG	1	
5	VPF0535	POLYETHYLENE BAG	1	
6	VPF0536	POLYETYHLENE BAG	1	
7	VMP7159	HD SDI CABLE	1	
8	VJS4132	CONNECTOR (FEMALE)	2	K1SMBDBA0001
9	VMP7356	CABLE HOLDER ANGLE	1	
10	VMT1359	CONNECTOR CUSHION	4	
11	VEE0E13100	CABLE	1	
12	VEE0E48100	CABLE	1	
13	XYN3+F6	SCREW	3	
E1	VEP83459B	HD SDI P.C.BOARD	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA300P ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP83459B	HD SDI RX P.C.BOARD	1	(RTL)
■ E1	VEP83459B	HD SDI RX P.C.BOARD	1	(RTL)
C1	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C2	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3	ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C4	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C5	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1	
C6-C9	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C10	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C11	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C12	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C13,14	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C15	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C16	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C17,18	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C19	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C20	ECST0JX336	T.CAPACITOR CH6.3V 33U	1	
C21	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C22-24	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C25	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C26	ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C27	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C28	ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C29	ECUX1H1R5CCV	C.CAPACITOR CH 50V 1.5P	1	
C30	ECUX1H0R5CCV	C.CAPACITOR CH 50V 0.5P	1	
C31	ECUX1H1R5CCV	C.CAPACITOR CH 50V 1.5P	1	
C32	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C33	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C34	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C35,36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C37-42	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	6	
C46	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1	
C51,52	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C53	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C54	ECST0JY156Z	T.CAPACITOR CH6.3V 15U	1	
C55,56	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C57	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P	1	
C58-61	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C62,63	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2	
C64	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C65	ECST0JY156Z	T.CAPACITOR CH6.3V 15U	1	
C66	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C67	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C68-70	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C71	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C72	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C73	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C74	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C75	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C76	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C77	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C78	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C79	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C80	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C81	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C82	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C83	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C84	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C85	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C86	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C87	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C88	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	

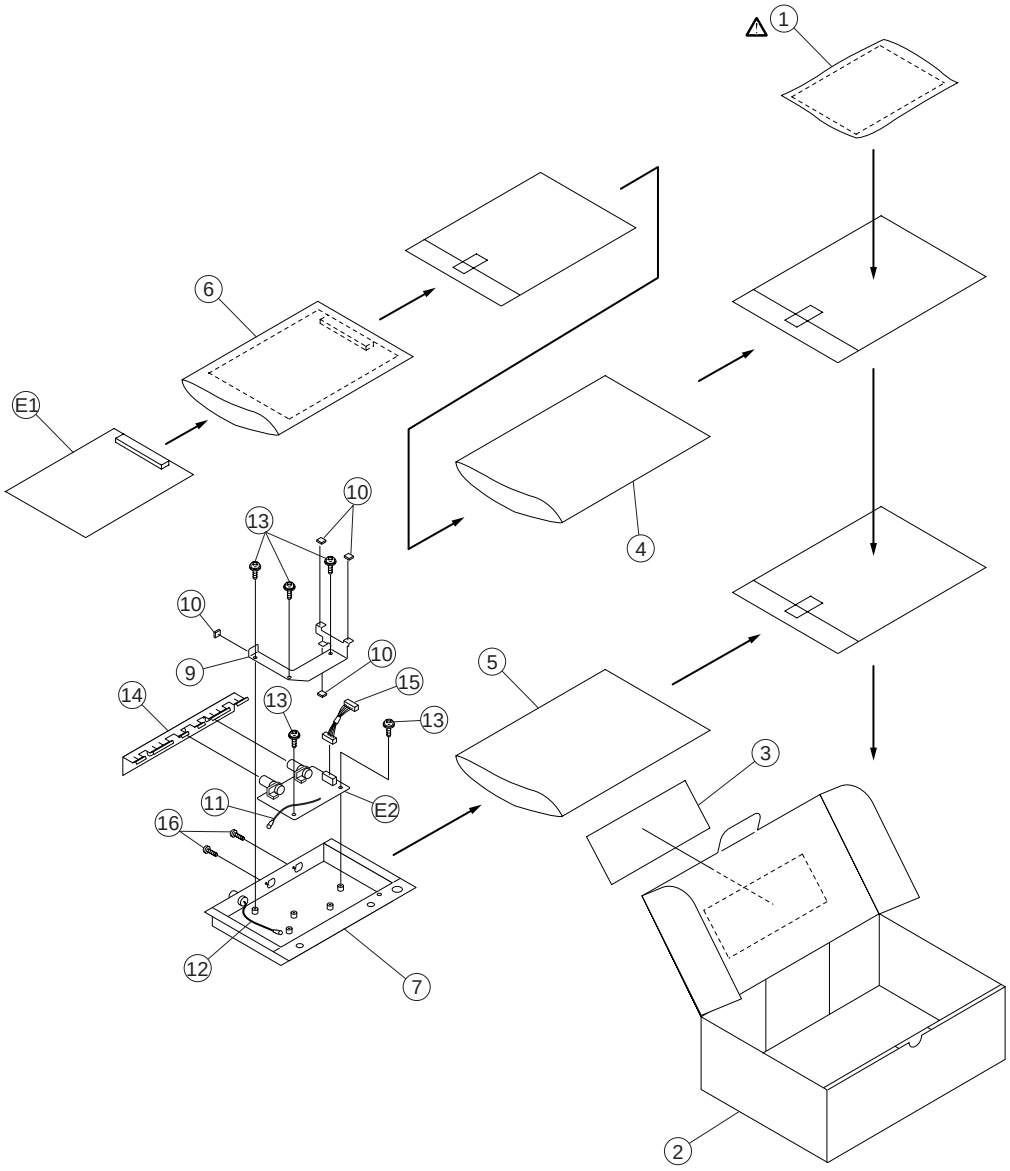
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C89	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C90-92	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C93	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C94	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C95	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C96	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C97	ECST1CY475	T.CAPACITOR CH 16V 4.7U	1	
C98	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C99	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C100	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
C101,02	ECST1CC336R	T.CAPACITOR CH 16V 33U	2	
C201-06	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	6	
C207	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C208	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C209	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C210	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C211	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C212	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C213	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C214	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C215	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C216-18	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
D1	MA3X71600L	DIODE	1	
D3	HSMS-2823	DIODE	1	
D4	HSMS-2824	DIODE	1	
D5	MA3J14300L	DIODE	1	
D6	MA142WK	DIODE	1	
D7	MA142K	DIODE	1	
IC1,C2	IVA-14208	IC	2	C0AAAA000033
IC3	C0JBZZ000015	IC	1	
IC4	UPC2746T	IC	1	
IC5	C0ABEB000023	IC	1	
IC6	AD8005ART	IC	1	
IC7,C8	UPC2726T	IC	2	
IC9	C1AB00001315	IC	1	
IC10	C9ZB00000361	IC	1	
IC11	C0JBBZ000174	IC	1	
J1-J3	VJP4131	CONNECTOR (MALE)	3	K1QZB1AD0003
J4	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
L1-L3	VLQ078210N	COIL	3	G1C10NGA0001
L4	VLQ07828N2	COIL	1	G1C8N2ZA0001
L5	VLQ078268N	COIL	1	G1C68NGA0001
L6	VLP0173	COIL	1	J0JGC0000015
L7	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
L9	VLQ07823N3	COIL	1	G1C3N3ZA0001
L10,11	VLP0173	COIL	2	J0JGC0000015
L201	VLP0183	COIL	1	J0JKC0000007
L202	VLQ0441K4R7	COIL 4.7UH	1	
L203	VLP0183	COIL	1	J0JKC0000007
L204,05	VLQ0441K4R7	COIL 4.7UH	2	
Q1-Q3	2SC5185	TRANSISTOR	3	
Q4	2SB1218A-R	TRANSISTOR	1	
Q5	2SC5013	TRANSISTOR	1	
Q6-Q9	2SD1819ALL	TRANSISTOR	4	
Q10,11	XP0460100L	TRANSISTOR	2	
Q12,13	2SC5185	TRANSISTOR	2	
Q14,15	2SC3583	TRANSISTOR	2	
R1,R2	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	2	
R3	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R4,R5	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R6	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R7	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R8	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R9	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R10	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R11	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R12	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R13	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R14	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R15,16	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2	
R17,18	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
R19	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R20	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R21	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R22	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R23	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R24	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R25	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R26	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R27	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R28,29	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
R30	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R31	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R32	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R33	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R36	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R37	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R38	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R39	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R40	ERJ3GEYJ106	M.RESISTOR CH 1/16W 10M	1	
R41,42	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	2	
R43	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R44,45	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R46,47	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R49	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R52,53	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
R54	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R55	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R56	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R57	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R58	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R59	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R60	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R61	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R62	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R63	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R65	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R66	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R67	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R68	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R69	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R71	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R72	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R73	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R75,76	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R77	VLQ07828N2	COIL	1	G1C8N2ZA0001
R78	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R79,80	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
R81	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R82-02	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	21	
R103,04	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R105	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R106	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R107,08	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R109	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R110	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1	
R111	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R112	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1	
R113	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R115,16	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R117	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R118	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R119	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R120	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R121	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R122	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R123	VRE006610102	M.RESISTOR CH 1/10W 1K	1	D0YD102JA007
R124	ERJ3RBD271	M.RESISTOR CH 1/16W 270	1	
R125	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R126	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R127	ERJ3RED680	M.RESISTOR CH 1/16W 68	1	
R128	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R129	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R130	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R131	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R140	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R201-23	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	23	
R225	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R226-31	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	6	
R232-34	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	3	
R235	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
SW1	VSS0367-02B	SWITCH	1	
TG1	VJR0646	TEST POINT	1	D0X0R0000022
VR1	EVM7JGA00B52	V.RESISTOR 500	1	
VR2	EVM7JGA00B53	V.RESISTOR 5K	1	
VR3	EVM7JGA00B14	V.RESISTOR 10K	1	
VR5	EVM7JGA00B13	V.RESISTOR 1K	1	
X1	VSX1057	CRYSTAL OSCILLATOR	1	H4G1487B0001
		MISCELLANEOUS		
	VSC4946	SHIELD COVER	1	
	VSC4947	SHIELD COVER	1	
	VSC4948	SHIELD COVER	1	

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA320P PACKING PARTS ASSEMBLY



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-YA320P PACKING PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ 1	VQT0B66	OPERATING INSTRUCTIONS	1	
2	VPG6296	PACKING CASE	1	
3	VQL9822	PACKING LABEL	1	
4	VPF0462	POLYETHYLENE BAG	1	
5	VPF0535	POLYETHYLENE BAG	1	
6	VPF0536	POLYETYHLENE BAG	1	
7	VMP7581	HD SDI CASE	1	
8	VJS4132	CONNECTOR (FEMALE)	2	K1SMBDBA0001
9	VMP7583	CABLE HOLDER ANGLE	1	
10	VMT1359	CONNECTOR CUSHION	4	
11	VEE0E13100	CABLE	1	
12	VEE0E48100	CABLE	1	
13	XYN3+F6	SCREW	3	
14	VMP7582	SHIELD PLATE	1	
15	VEE0X32	SDI-2CH CABLE	1	
16	XSN26+6FZ	SCREW	1	
E1	VEP83459C	HD SDI RX P.C.BOARD	1	
E2	VEP10114A	SDI-2CH P.C.BOARD	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

BT-YA320P ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP83459C	HD SDI RX P.C.BOARD	1	(RTL)
■ E2	VEP10114A	SDI-2CH P.C.BOARD	1	(RTL)
				(RTL)
■ E1	VEP83459C	HD SDI RX P.C.BOARD	1	(RTL)
C1	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C2	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C3	ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C4	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C5	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1	
C6-C9	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C10	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C11	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C12	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C13,14	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C15	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C16	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C17,18	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C19	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C20	ECST0JX336	T.CAPACITOR CH6.3V 33U	1	
C21	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C22-24	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C25	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C26	ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C27	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C28	ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C29	ECUX1H1R5CCV	C.CAPACITOR CH 50V 1.5P	1	
C30	ECUX1H0R5CCV	C.CAPACITOR CH 50V 0.5P	1	
C31	ECUX1H1R5CCV	C.CAPACITOR CH 50V 1.5P	1	
C32	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C33	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C34	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C35,36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C37-42	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	6	
C46	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1	
C51,52	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C53	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C54	ECST0JY156Z	T.CAPACITOR CH6.3V 15U	1	
C55,56	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C57	ECUX1H472KBV	C.CAPACITOR CH 50V 4700P	1	
C58-61	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
C62,63	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2	
C64	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C65	ECST0JY156Z	T.CAPACITOR CH6.3V 15U	1	
C66	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C67	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C68-70	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C71	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C72	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C73	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C74	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C75	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C76	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C77	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C78	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C79	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C80	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C81	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C82	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C83	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C84	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C85	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C86	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	

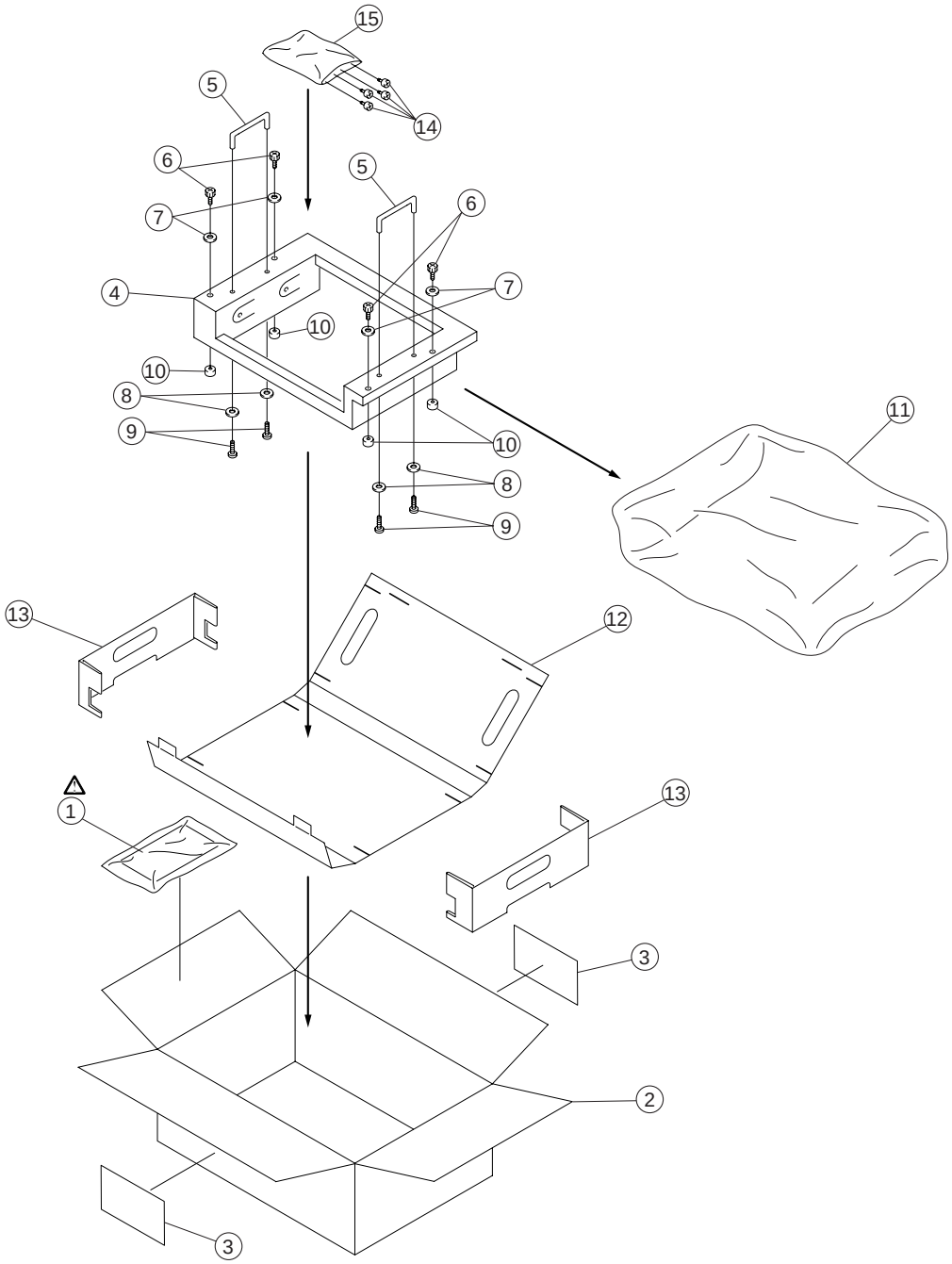
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C87	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C88	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C89	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C90-92	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C93	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C94	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C95	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C96	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C97	ECST1CY475	T.CAPACITOR CH 16V 4.7U	1	
C98	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C99	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C100	ECUX1C225ZFN	C.CAPACITOR CH 16V 2.2U	1	
C101,02	ECST1CC336R	T.CAPACITOR CH 16V 33U	2	
C201-06	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	6	
C207	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C208	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C209	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C210	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C211	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C212	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C213	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C214	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C215	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C216-18	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
D1	MA3X71600L	DIODE	1	
D3	HSMS-2823	DIODE	1	
D4	HSMS-2824	DIODE	1	
D5	MA3J14300L	DIODE	1	
D6	MA142WK	DIODE	1	
D7	MA142K	DIODE	1	
IC1,C2	IVA-14208	IC	2	C0AAAA000033
IC3	C0JBZZ000015	IC	1	
IC4	UPC2746T	IC	1	
IC5	C0ABEB000023	IC	1	
IC6	AD8005ART	IC	1	
IC7,C8	UPC2726T	IC	2	
IC9	C1AB00001315	IC	1	
IC10	C9ZB00000361	IC	1	
IC11	C0JBBZ000174	IC	1	
J1-J3	VJP4131	CONNECTOR (MALE)	3	K1QZB1AD0003
J4	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
L1-L3	VLQ078210N	COIL	3	G1C10NGA0001
L4	VLQ07828N2	COIL	1	G1C8N2ZA0001
L5	VLQ078268N	COIL	1	G1C68NGA0001
L6	VLP0173	COIL	1	J0JGC0000015
L7	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
L9	VLQ07823N3	COIL	1	G1C3N3ZA0001
L10,11	VLP0173	COIL	2	J0JGC0000015
L201	VLP0183	COIL	1	J0JKC0000007
L202	VLQ0441K4R7	COIL 4.7UH	1	
L203	VLP0183	COIL	1	J0JKC0000007
L204,05	VLQ0441K4R7	COIL 4.7UH	2	
Q1-Q3	2SC5185	TRANSISTOR	3	
Q4	2SB1218A-R	TRANSISTOR	1	
Q5	2SC5013	TRANSISTOR	1	
Q6-Q9	2SD1819ALL	TRANSISTOR	4	
Q10,11	XP0460100L	TRANSISTOR	2	
Q12,13	2SC5185	TRANSISTOR	2	
Q14,15	2SC3583	TRANSISTOR	2	
R1,R2	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	2	
R3	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R4,R5	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R6	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R7	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R8	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R9	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R10	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R11	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R12	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R13	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R14	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R15,16	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	2	
R17,18	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
R19	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R20	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R21	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R22	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R23	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R24	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R25	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R26	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R27	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R28,29	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
R30	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R31	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R32	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R33	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R36	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R37	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R38	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R39	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R40	ERJ3GEYJ106	M.RESISTOR CH 1/16W 10M	1	
R41,42	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	2	
R43	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R44,45	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R46,47	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R49	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R52,53	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
R54	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R55	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R56	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R57	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R58	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R59	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R60	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R61	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R62	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R63	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R65	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R66	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R67	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R68	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R69	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R71	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R72	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R73	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R75,76	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R77	VLQ07828N2	COIL	1	G1C8N2ZA0001
R78	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R79,80	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
R81	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R82-02	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	21	
R103,04	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R105	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R106	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R107,08	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R109	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R110	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1	
R111	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R112	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1	
R113	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R115,16	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R117	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R118	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R119	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R120	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R121	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R122	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R123	VRE006610102	M.RESISTOR CH 1/10W 1K	1	D0YD102JA007
R124	ERJ3RBD271	M.RESISTOR CH 1/16W 270	1	
R125	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R126	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R127	ERJ3RED680	M.RESISTOR CH 1/16W 68	1	
R128	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R129	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R130	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R131	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R140	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R201-23	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	23	
R225	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R226-31	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	6	
R232-34	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	3	
R235	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
SW1	VSS0367-02B	SWITCH	1	
TG1	VJR0646	TEST POINT	1	D0X0R0000022
VR1	EVM7JGA00B52	V.RESISTOR 500	1	
VR2	EVM7JGA00B53	V.RESISTOR 5K	1	
VR3	EVM7JGA00B14	V.RESISTOR 10K	1	
VR5	EVM7JGA00B13	V.RESISTOR 1K	1	
X1	VSX1057	CRYSTAL OSCILLATOR	1	H4G1487B0001
		MISCELLANEOUS		
	XYN26+J8	SCREW	4	
	VMX2605	WASHER	8	
	VSC4946	SHIELD COVER	1	
	VSC4947	SHIELD COVER	1	
	VSC4948	SHIELD COVER	1	
■ E2	VEP10114A	SDI-2CH P.C.BOARD	1	(RTL)
C2	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
D1,D2	MA152K	DIODE	2	
J1,J2	K1QBB1BB0010	CONNECTOR (FEMALE)	2	
J3	VJP4131	CONNECTOR (MALE)	1	K1QZB1AD0003
L2	VLQ0441K4R7	COIL 4.7UH	1	
L3	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
L7,L8	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
P1	VJP3440A016	CONNECTOR (MALE)	1	K1KA16A00138
Q1,Q2	2SD601A	TRANSISTOR	2	
QR1	UNR221300L	TRANSISTOR	1	
R3-R5	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R6	ERJ3GEYJ750	M.RESISTOR CH 1/16W 75	1	
RY1,Y2	K6D1CGA00008	RELAY	2	
TP1	EYF6CU	TEST POINT	1	
TPG1	EYF6CU	TEST POINT	1	
		MISCELLANEOUS		
	XYN26+K6	SCREW	2	

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-MA1800P PACKING PARTS ASSEMBLY



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

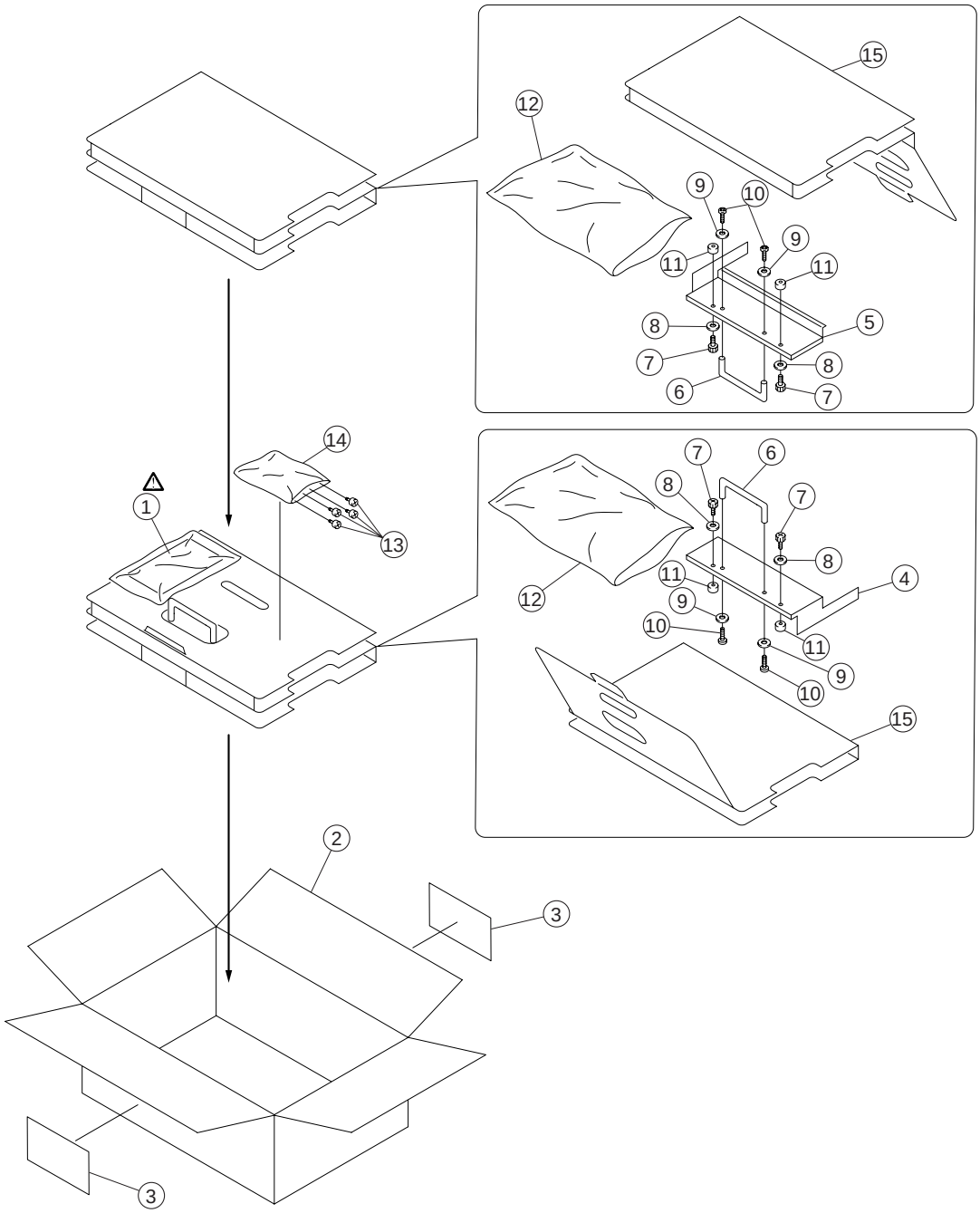
BT-MA1800P PACKING PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠1	VQT9925	OPERATING INSTRUCTIONS	1	
2	VPG0Q21	PACKING CASE	1	
3	VQL9822	PACKING LABEL	2	
4	VMP7291	RACK MOUNT ANGLE	1	
5	VKH0409	HANDLE	2	
6	VHD0306	SCREW	4	
7	VMX0658	WASHER	4	
8	XWA5BFZ	WASHER	4	
9	XSB5+8FZ	SCREW	4	
10	VMX0871	HOLDER SPACER	4	
11	VPF0364	POLYETHYLENE BAG	1	
12	VPN5780	CUSHION (A)	1	
13	VPN5781	CUSHION (B)	2	
14	VHD0296	SCREW	1	
15	VPF1016	POLYETHYLENE BAG	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-MA1500P PACKING PARTS ASSEMBLY



Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

BT-MA1500P PACKING PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠1	VQT9925	OPERATING INSTRUCTIONS	1	
2	VPG0Q22	PACKING CASE	1	
3	VQL9822	PACKING LABEL	2	
4	VMP7292	RACK MOUNT ANGLE (L)	1	
5	VMP7293	RACK MOUNT ANGLE (R)	1	
6	VKH0409	HANDLE	2	
7	VHD0306	SCREW	4	
8	VMX0658	WASHER	4	
9	XWA5BFZ	WASHER	4	
10	XSB5+8FZ	SCREW	4	
11	VMX0871	HOLDER SPACER	4	
12	VPF0366	POLYETHYLENE BAG	2	
13	VHD0296	SCREW	4	
14	VPF1016	POLYETHYLENE BAG	1	
15	VPN5782	CUSHION (A)	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

SECTION 1

SERVICE INFORMATION

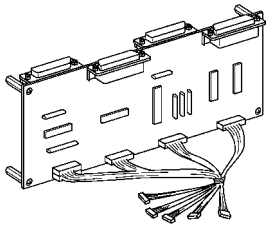
CONTENTS

1. Serviceing Fixtures & Tools INF-1
2. List of Recommended Measuring Instruments INF-2
3. Maintenance INF-2
3-1. Necessity for maintenance INF-2
3-2. Maintenance Schedule INF-2
4. Service menu INF-3
4–1. Service Menu Operation Method INF-3
4–2. POSITION MODE INF-4
4–3. Returning menu items to the default INF-4
5. How to set the internal switches INF-5
6. Error Message Specification INF-6
7. Software Version Upgrade Method INF-6
7-1. Version Upgrade for the microprocessor with Flash Memory INF-6
7-2. Version Upgrade Preparations INF-6
7-2-1. Items required to write to the flash memory INF-6
7-2-2. Installation of version up software INF-6
7-2-3. Connection INF-6
7-2-4. Writing steps INF-7
8. Updating the PLD version INF-10
8-1. Steps to update the PLD (ALTERA) INF-10

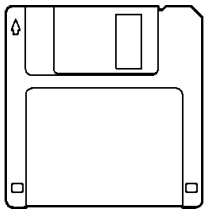
1. Serviceing Fixtures & Tools

No.	PART	FIXTURE & TOOL NAME	PURPOSE	REMARK
1	VFK1590	CPLD writer	PLD version up	
2	VFK1791	version up software	Flash ROM version up	
3	VFK1792	Gamma correction software	Gamma correction data writing	
4	VFK1793	Extension cable (A)	MAIN (P60002) ~ SUB (P30004)	
5	VFK1794	Extension cable (B)	DC-DC MAIN (P1403) ~ MAIN (P60003) ~ SUB (P30002)	
6	VFK1795	Extension cable (C)	LCD Panel (CN202) ~ MAIN (P60202)	
7	VFK1796	Extension cable (D)	LCD Panel (CN201) ~ POWER (P1105)	
8	VFK1797	Extension cable (E)	LCD Panel (CN2) ~ MAIN (P68004)	LH1800
9	VFK1798	Extension cable (F)	LCD Panel (CN1) ~ MAIN (P68003)	LH1800
10	VFK1799	Extension cable (G)	LCD Panel (CN2) ~ MAIN (P68001)	LH1500
11	VFK1800	Extension cable (H)	LCD Panel (CN1) ~ MAIN (P68002)	LH1500

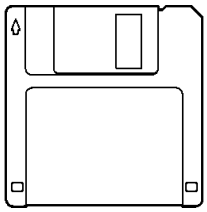
1 VFK1590
CPLD writer



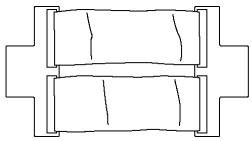
2 VFK1791
version up software



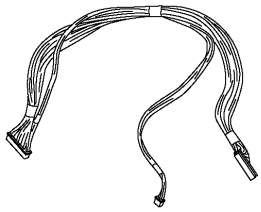
3 VFK1792
Gamma correction software



4 VFK1793
Extension cable (A)



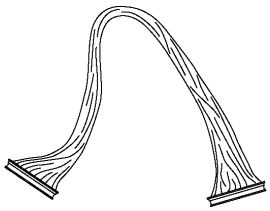
5 VFK1794
Extension cable (B)



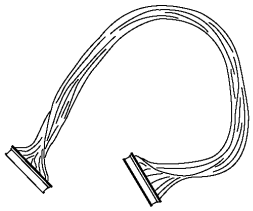
6 VFK1795
Extension cable (C)

7 VFK1796
Extension cable (D)

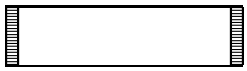
8 VFK1797
Extension cable (E)



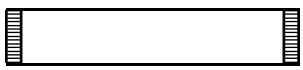
9 VFK1798
Extension cable (F)



10 VFK1799
Extension cable (G)



11 VFK1800
Extension cable (H)



2. List of Recommended Measuring Instruments

MODEL NO. (Example)	NAME	REMARK
TG351A	Digital test signal generator	Shibasoku
CA-210	Color analyzer	Minolta
	Oscilloscope	With 400 MHz or more, 2-channels, and XY mode
	Digital voltmeter (D.V.M)	
	Frequency counter	

3. Maintenance

3-1. Necessity for maintenance

The LCD has a light source and fan motor which are consumable items that deteriorate over time and can cause lower performance and malfunction of the LCD. You should, therefore, perform maintenance regularly to prevent lower performance and potentially damaging malfunctions.

3-2. Maintenance Schedule

The times given below indicate rough times for maintenance. They do not indicate the operating life of the various parts. The times and part numbers are subject to change so consult the most recent maintenance guidelines.

No.	Part Name	Part No.	Quantity	Hours of exchange (unit: hours)	
				each 10,000H	each 30,000H
1	General inspection and adjustment	——	——	●	——
2	Fan motor	L6FALEDH0001	1	●	——
3	Backlight unit	VEK9980 (For LH1500) VEK1982 (For LH1800)	1	——	●

NOTE:

- Refer to the times displayed under each item under the MAINTENANCE in the onscreen menus as a guide to replacement times.

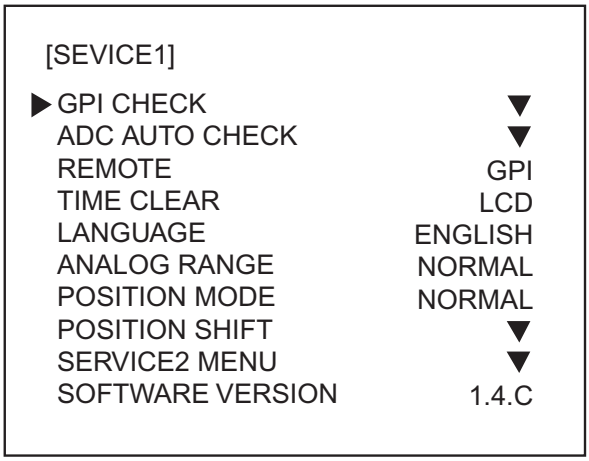
Name	Item under MAINTENANCE in the onscreen menus
General inspection and adjustments	LCD
Fan motor	FAN
Backlight unit	BACKLIGHT

- The LCD's gamma adjustment is included in General inspection and adjustments.
- General inspection and adjustments is included in when replacing the backlight unit.

4. Service menu

4-1. Service Menu Operation Method

1. While simultaneously pressing the [A]and [S] input select buttons and the [OPTION] button, switch on the unit's power.
2. Within 5 seconds of switching the power on, press the [MENU/EXIT] button. The service menu (SERVICE 1 menu) appears on the LCD. Press [∨] and [∧] to select the item, then press [ENTER]. The screen to change the item appears. Note: The menu screen disappears after 2 minutes if you do nothing. Press [MENU] again to show the menu screen again.
3. Press [DOWN] or [UP] to select an item, then [ENTER] to go to the item's submenu.



Setting items	Options	Content and descriptions
GPI CHECK	▼	Checks the function of the GPI terminal
ADC CHECK	▼	Sets the automatic adjustment of the ADC value
REMOTE	GPI	Sets the remote terminal
	RS-232C	
TIME CLEAR	LCD	Clears the time on each hour meter
	BACK LIGHT	
	FAN	
LANGUAGE	ENGLISH FRENCH GERMAN	Menu language settings
ANALOG RANGE	NORMAL 120% 140%	Analog range settings
POSITION MODE	NORMAL	Adjusts the position of the picture. The position selected in POSITION SHIFT is selected if you change the setting to SHIFT
	SHIFT	
POSITION SHIFT	▼	Adjusts the position of the picture. The position set is effective only if you have selected SHIFT in POSITION MODE.
SERVICE2 MENU	▼	Cannot be selected.
SOFTWARE VERSION	1.4.C	Shows the version of the software.

4-2. POSITION MODE

You can move the position of the picture on the LCD and save the position for each signal. The position set is effective only if you have selected SHIFT in POSITION MODE in the service menu.

```
[POSITION  SHIFT]
INPUT                    :  LINE  A
SIGNAL                   :  NTSC

  >1.  [DOWN-UP]F4       0000
   2.  [LEFT-RIGHT]RGB   0000
   3.  [WRITE  EEPROM]

  ---COMPLETE---
  PRESS   [ENTER]  KEY
```

Step 1: Moving the picture up and down
You can adjust the picture up and down when the cursor is next to DOWN-UP.
[MENU/EXIT] : Stop adjustment
[∨] : Move the picture down
[∧] : Move the picture up
[ENTER] : Move to the next step

STEP 2: Step 1: Moving the picture left and right
You can adjust the picture left and right when the cursor is next to LEFT-RIGHT.
[MENU/EXIT] : Stop adjustment
[∨] : Move the picture left
[∧] : Move the picture right
[ENTER] : Move to the next step

STEP 3: Saving to EEPROM
You can save the adjustments you made in STEP 1 and STEP 2 when the cursor is next to WRITE EEPROM.
[MENU/EXIT] : Stop adjustment
[ENTER]: Save the adjustments you made in STEP 1 and STEP 2 to EEPROM.

```
---POSITION  SAVE---
   ----COMPLETE----
```

The settings are saved when the above message appears.

NOTE: The settings are not saved if you press [MENU/EXIT] before the above menu appears.

4-3. Returning menu items to the default

1. Returning menu values, rotary recorder values, and service menu values to the default

Check the setting of the display switch, then switch the power on while pressing [A], [MENU/EXIT] and [∧] to return the values to the default.

Note : As the menu default values differ with the product, panel size, and destination, check the setting of the DIPSW1-1 switch on the SUB board. See page 5 for details on how to set internal switches.

2. Initializing the hour meter

Switch the power on while pressing [A], [S] and [OPTION]. Then, within 5 seconds, press [∨] and [ENTER] to reinitialize the hour meter.

Press [MENU/EXIT] to show the menus, select the MAINTENANCE menu and check that the hour meters have returned to 0H.

5. How to set the internal switches

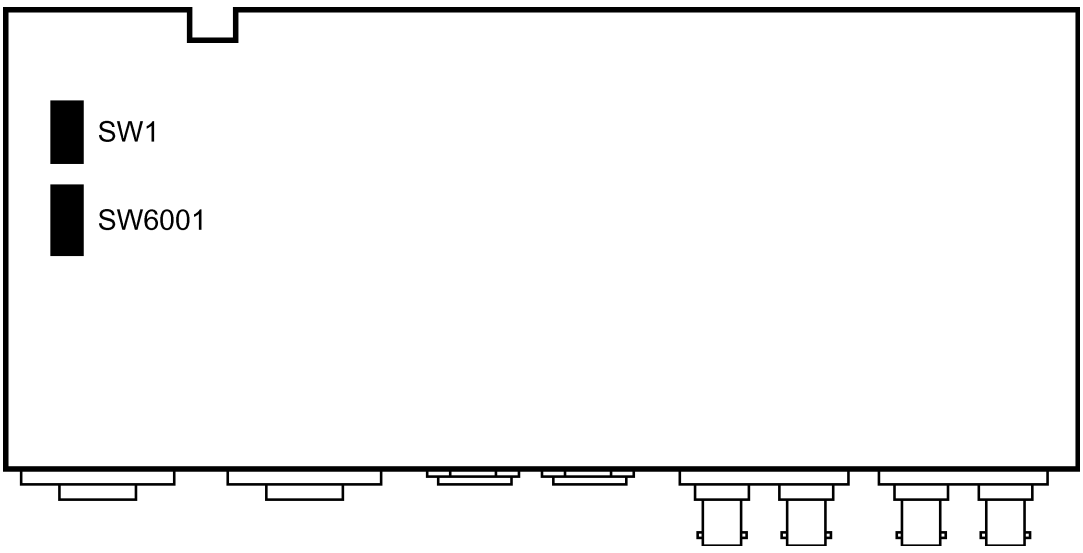
The table shows the functions of the switches on the sub board. Switches indicated "**Factory use only**" must be set to the "**Factory Setting**".

DIPSW1	Function	Factory Setting	Explanation	
			RS-232C Write	Flash Write
1	Used when writing over microprocessor software.	ON	OFF	OFF
2	Used when writing over microprocessor software.	ON	OFF	OFF
3	Used when writing over microprocessor software.	OFF	OFF	OFF
4	Used when writing over microprocessor software.	ON	ON	OFF
5	Used when writing over microprocessor software.	OFF	ON	OFF
6	Factory use only	OFF	———	
7	Change panel size	OFF/ON	OFF:18 inch, ON:15 inch	
8	Factory use only	OFF	———	

DIP SW36001	Factory setting	Explanation
1 ~ 8	Different settings for each product	(Used only in the factory) Used for adjusting SDI CLK timing

SUB board DIP SW location

SUB board (VEP13111A) COMPONENT SIDE



6. Error Message Specification

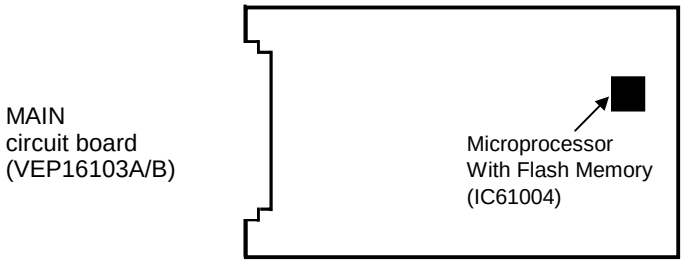
This unit can detect the following errors and display messages indicating them.

No.	Error	Error detail	Display method
1.	CRCC ERROR	There was a transfer error with an SD card or the HD-SDI.	"CSCC ERROR" appears on the LCD for about 1 second.
2.	FAN STOP ERROR	The fan has stopped.	When the fan stops : After 5 seconds : the LED at the top of the rotary encoder blinks and FAN ERROR appears on the LCD. After 10 seconds : the backlight dims to minimum brightness. After 3 minutes : the unit switches off.

7. Software Version Upgrade Method

7-1. Version Upgrade for the microprocessor with Flash Memory

The microcomputers on the MAIN circuit board has bulit-in flash memory. Version up the software accrding to the following procedure.



7-2. Version Upgrade Preparations

7-2-1. Items required to write to the flash memory

- Software for updating
  VFK1791 (Flash starter)
- PC Windows 95,98
- RS-232C cable (9P straight cable)

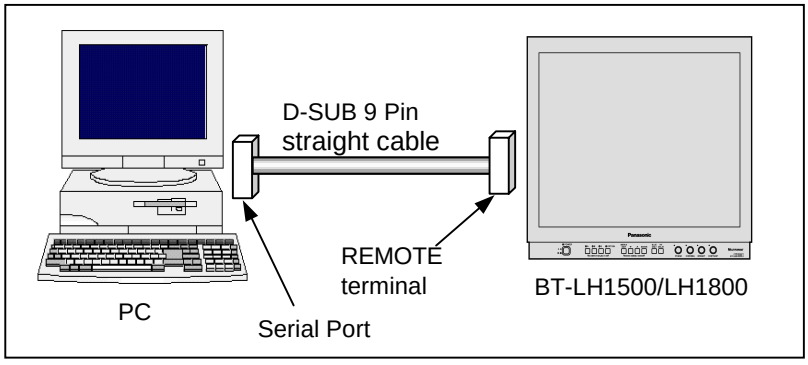
7-2-2. Installation of version up software

Copy the following file to a directory of your choice on the Windows 95/98 compatible computer.

- VFK1791(Flash starter)

7-2-3. Connection

- Switch the unit's power off, and then connect the RS-232C cable (9P straight cable) to the unit's REMOTE terminal (D-Sub 9 pin) and the computer as shown below.

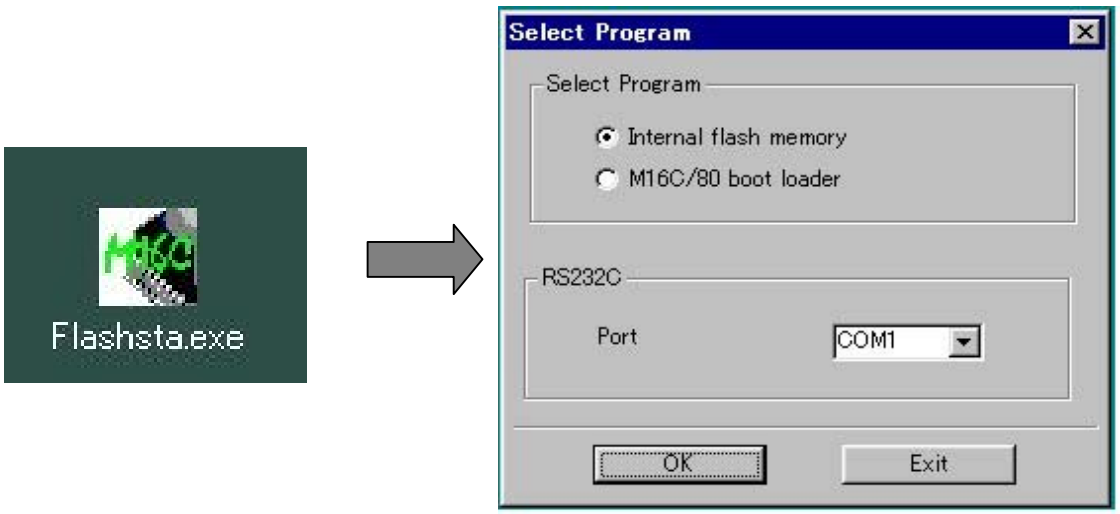


7-2-4. Writing steps

1. Set DIP-SW1 1 to 5 on the SUB board as follows. Leave 6 to 8 in the factory set positions.

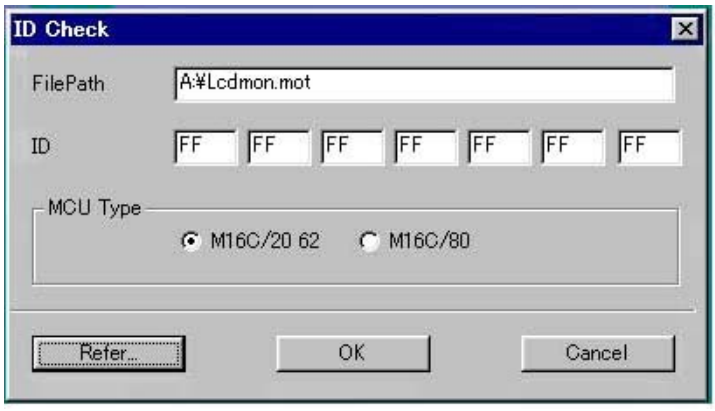
DIP-SW	1-1	OFF	1-5	ON
	1-2	OFF	1-6	OFF
	1-3	OFF	1-7	OFF
	1-4	ON	1-8	OFF

2. Switch the unit's power on.
3. Start up the software for updating the flash memory. "**flashsta.exe**"
4. The Select Program dialog appears.



5. Make the following settings in the Select Program dialog.
   ◎ Select Program → "**Internal flash memory**"
   ◎ RS232C (Port) → "**RS-232C connection port**"

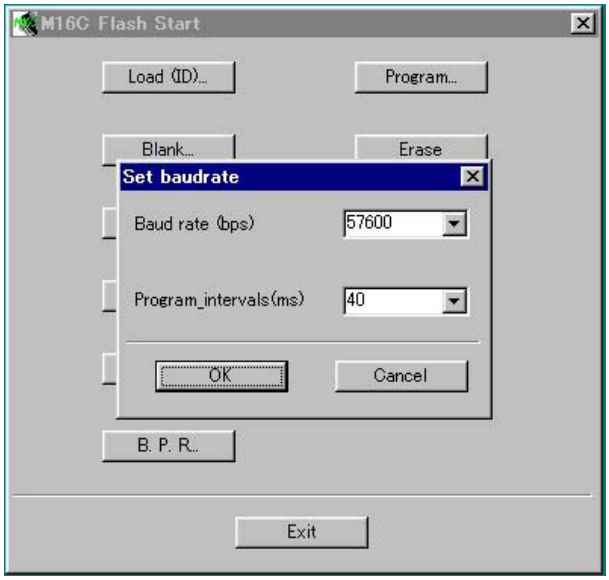
After making the settings in Select Program and clicking OK, the ID Check dialog appears. If it does not appear, recheck Select Program, the connections to the computer and unit, the Dip-SW1 settings on the SUB board, and the RS-232C cable.



6. Make the following settings in the ID Check dialog.
   ◎ File Path → "**File Data**" (Use Refer to select the version updating software's MOT file). When the MOT file is selected, the file name appears in File Path and FF appears in the ID boxes.
   ◎ MCU Type → "**M16C/20 62**"

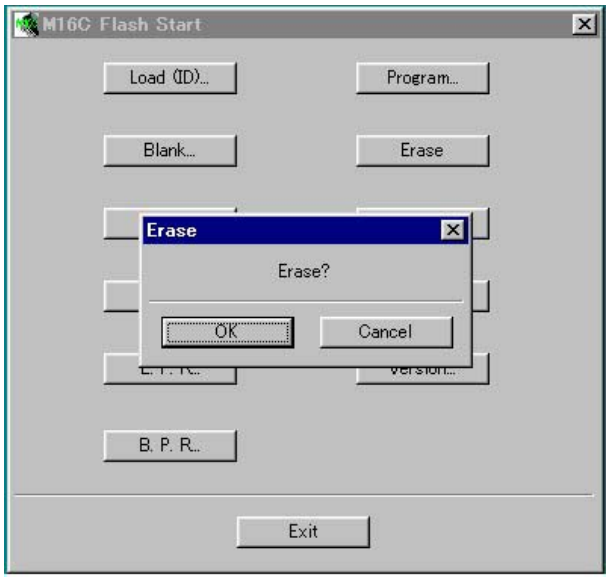
After making the settings in Select Program and clicking OK, the M16C Flash Start dialog appears.

7. Click Setting in the M16C Flash Start dialog and Set baudrate appears. Make the following settings in the Set baudrate dialog.
   - Set baudrate → "**57600**"
   - Program intervals → "**40**"

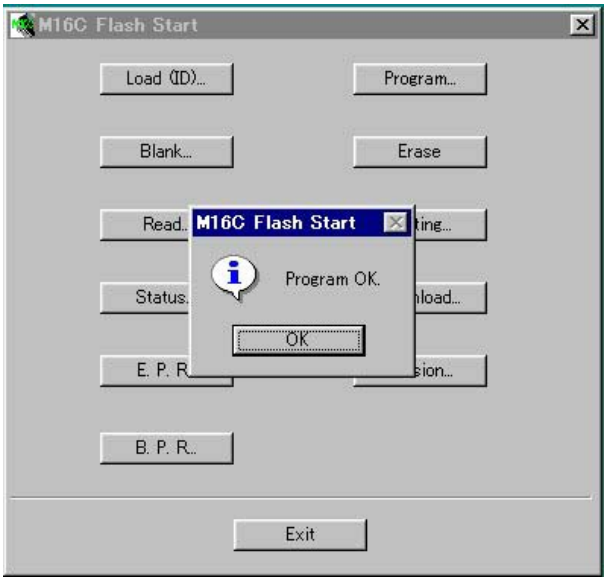


After making the settings in Set baudrate and clicking OK, the M16C Flash Start dialog reappears.

8. Click E.P.R (Erase Program Read) in the M16C Flash Start dialog and Erase appears. Click OK and the software's Program and Read Check run.
   A bar appears while Program and Read Check are running to show the progress.



9. "**Program OK**" appears if the Program ends correctly. Click OK then Exit to end Flash Starter.



10. Switch the unit off and disconnect the RS-232C cable.
11. Return the DIP-SW1 on the SUB board to the factory settings.
12. Check that the software's version has been updated in the service menu.

8. Updating the PLD version

The MAIN board of the BT-LH1500/LH1800 uses PLD (Programmable Logic Devices). Follow these steps to update the version.

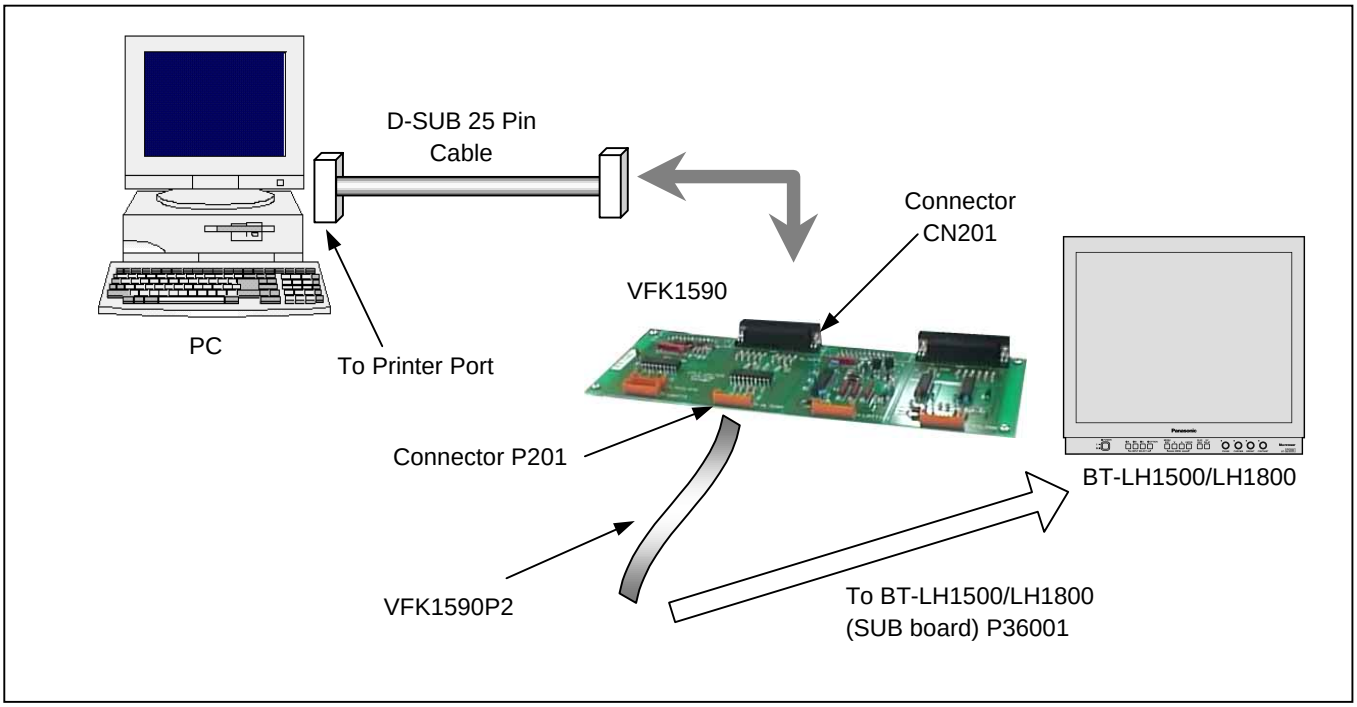
8-1. Steps to update the PLD (ALTERA)

A. Preparation

Material	Details
CPLD writer	VFK1590 VFK1590P2 (Cable : included with VFK1590)
25 Pin - 25 Pin cable	Straight (male -female), less than 1.5 meter
Writing software	MAX+plusIISoftware: www.altera.com/pub/softeware/asap2.exe Download from the URL and install to a directory of your choice.
Version updater	Tdf file or pof file (included with the VSI**** file)
Computer	Running on PC Windows 95,98

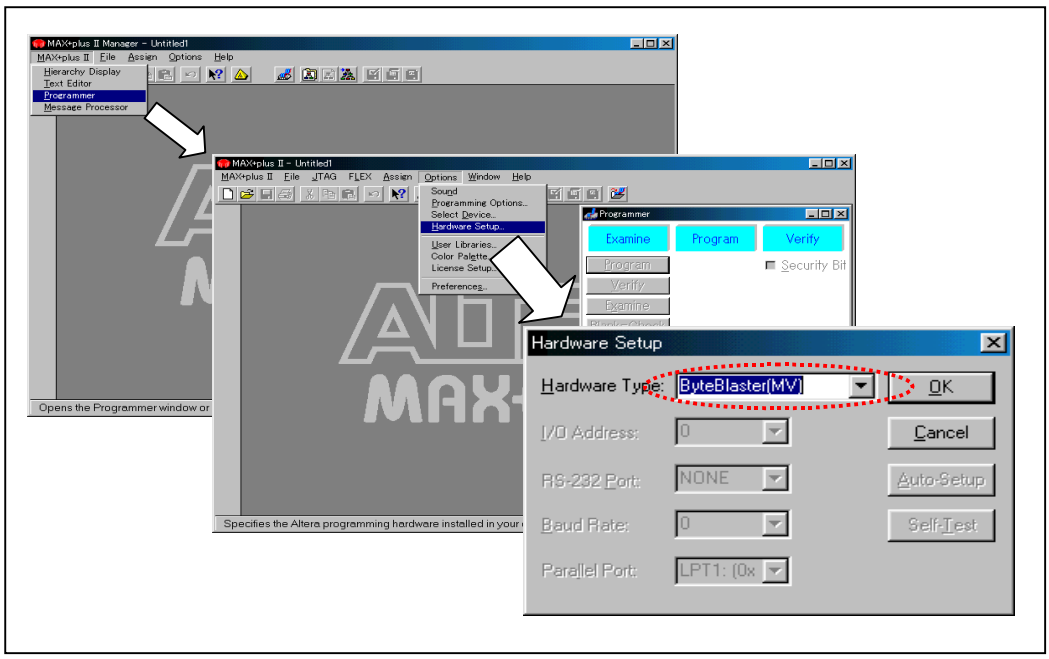
B. Connection

1. Connect the 25 Pin - 25 Pin cable to the CN201 connector (for ALTERA) on the CPLD writer (VFK1590).
2. Using the cable (VFK1590P2) included with the CPLD writer, connect the BT-LH1500/1800 SUB board's P36001 connector and the CPLD writer's P201 connector. (Take care when inserting the connector.)
3. Switch on the unit and the computer.



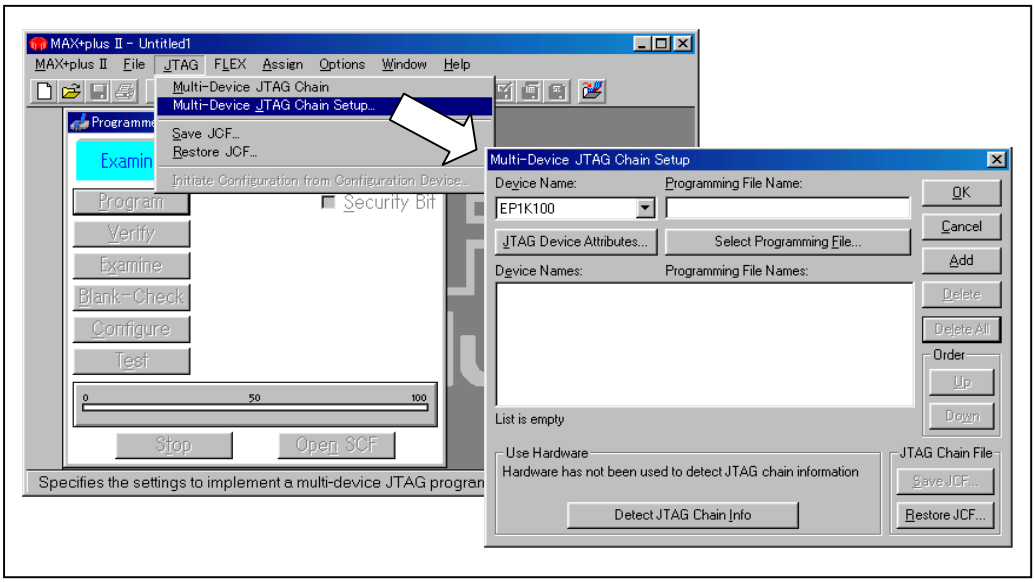
C. Starting the writing software and updating the version

1. Start "**MAX+plusII10.2programmer only**".
2. In the main window, click the "**MAX+plusII**" tab and select "**Programmer**".
3. After displaying Programmer, click the "**Option**" tab and select "**Hardware Setup**".

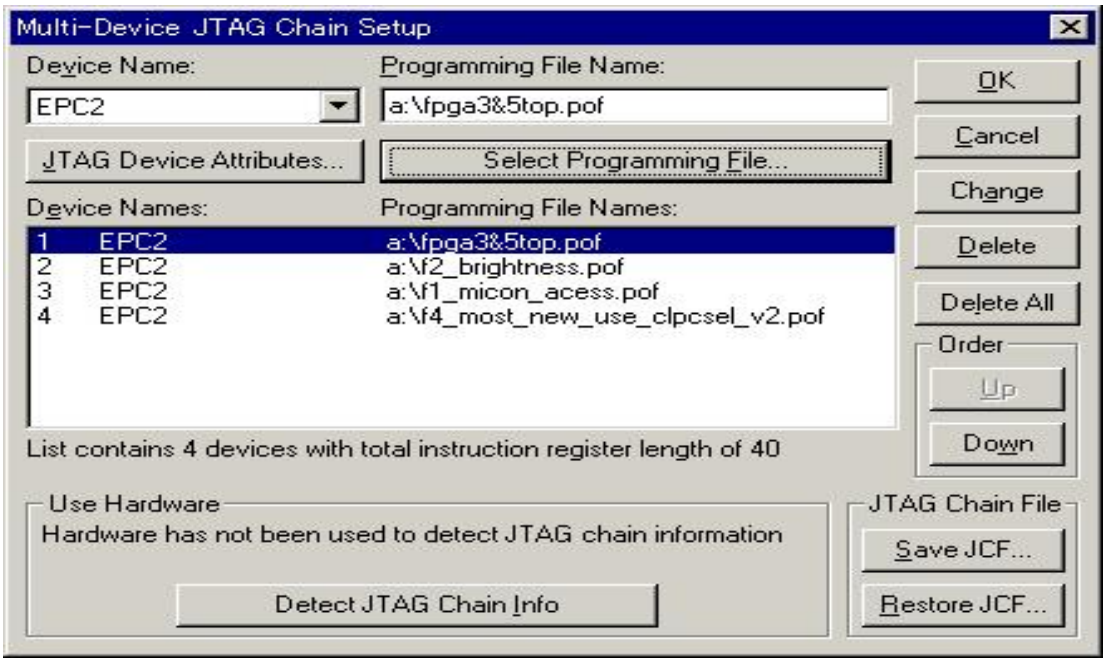


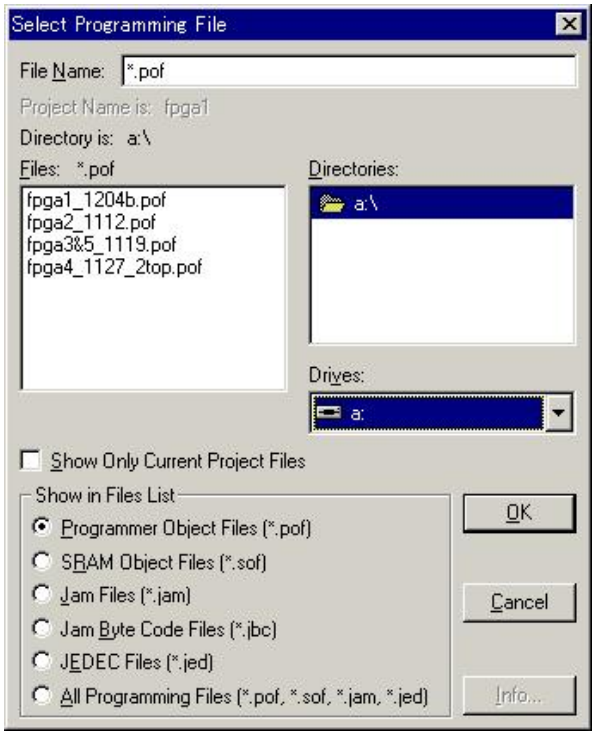
4. In the Hardware Setup dialog, select "**ByteBlaster (MV)**" in "Hardware Type.

5. After displaying Programmer, click the "**JTAG**" tab and select "**Multi-Device JTAG Chain Setup**".

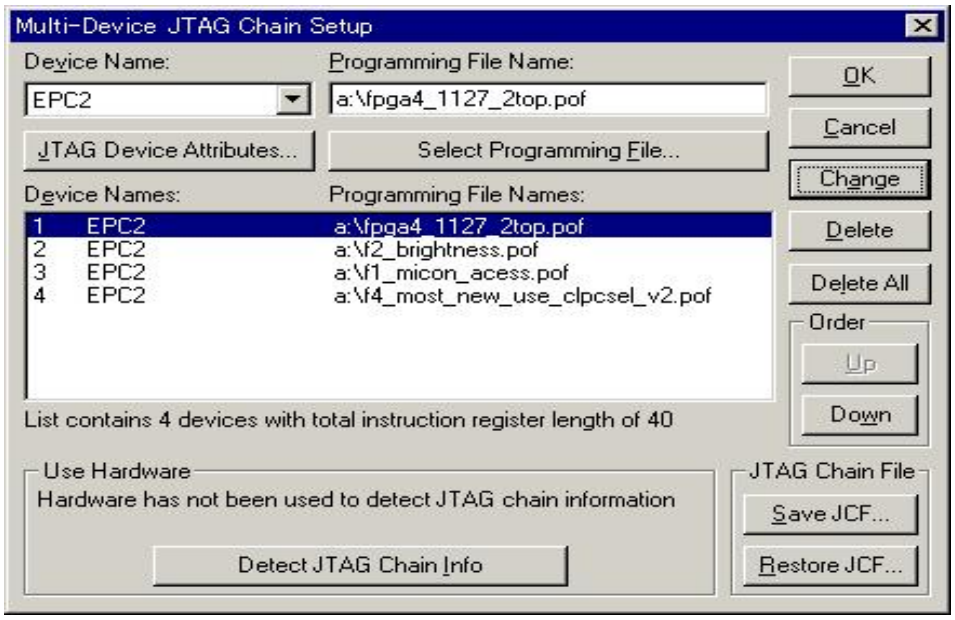


6. Click "**1**" in "**Device's Names**" and double-click the "**Select Program File**" button to open the "**Select Program File**" dialog. Now select the drive containing the software. (If it is in the floppy disk drive, select "**a:**" in "**Drives**".)



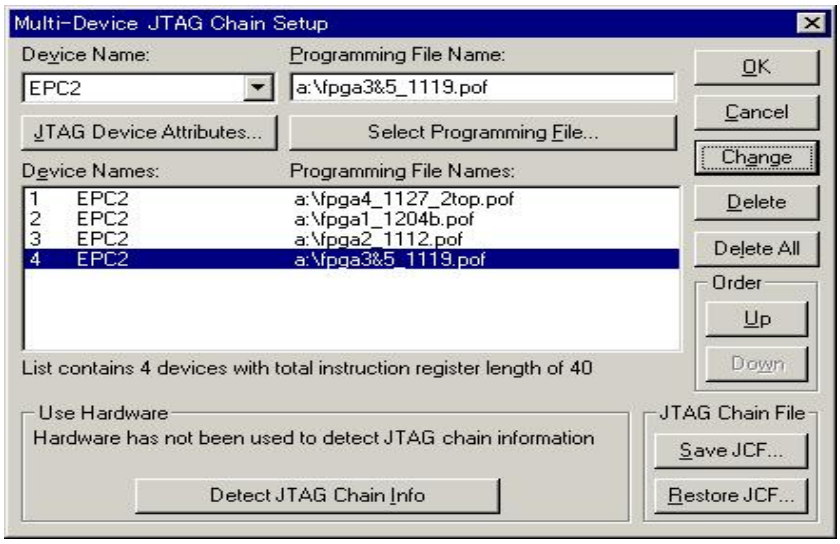


7. After loading the program file, select "**fpga4_**.pof**". Once the program file you selected in "**Programming File Name**" is displayed in "**Multi-Device JTAG Chain Setup**", click the "**Change**" button.
The "**fpga4_**.pof**" file you selected in the first line of "**Device's Names**" is allocated.

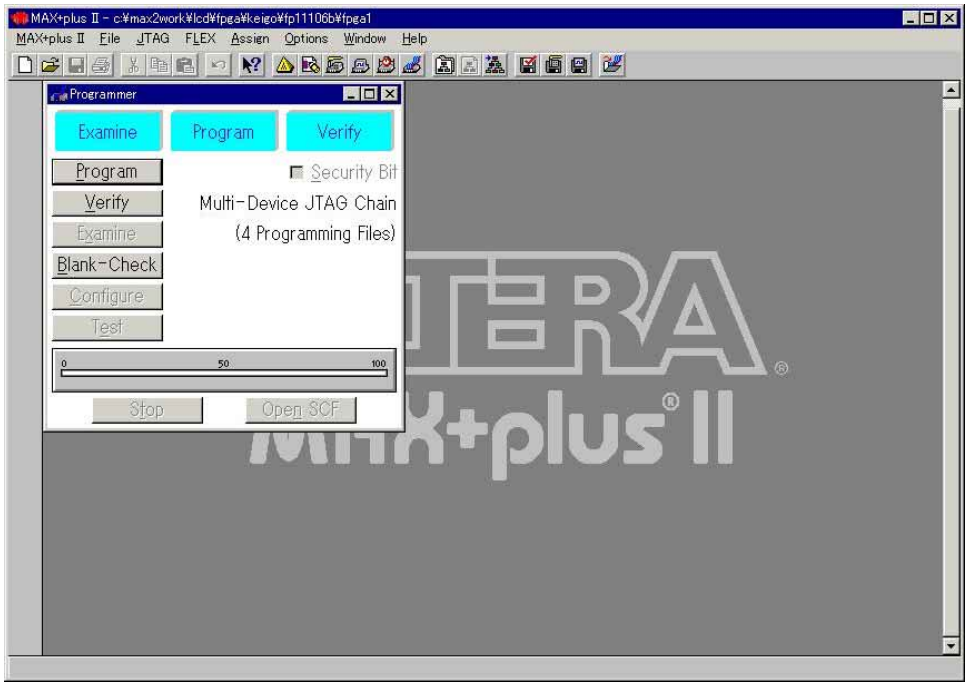


8. Select line 2 in "**Device Names**" and repeat steps 6 and 7 to allocate "**fpga1_**.pof**". Continue in the same way to allocate "**fpga2_**.pof**" to line 3 and "**fpga3_**.pof**" to line 4.

9. When you have finished allocating the program files, click "**OK**" in "**Multi-Device JTAG Chain Setup**".



10. After displaying Programmer, click the "Program" button. Writing of the 4 programs you allocated begins. Writing of the PLD is complete when the progress bar reaches 100. Click "OK" in the dialog that appears when writing is complete.



SECTION 2

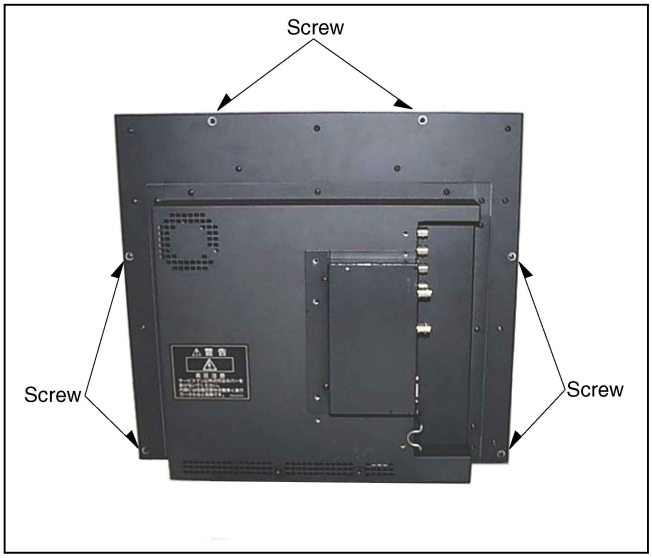
DISASSEMBLY PROCEDURES

CONTENTS

1. Removal of Front Panel DIS-1
2. Removal of LCD Panel DIS-1
3. Removal of Backlight DIS-1
4. Removal of Back Case DIS-3
5. Removal of Fan Motor DIS-4
6. Removal of Power Unit DIS-5

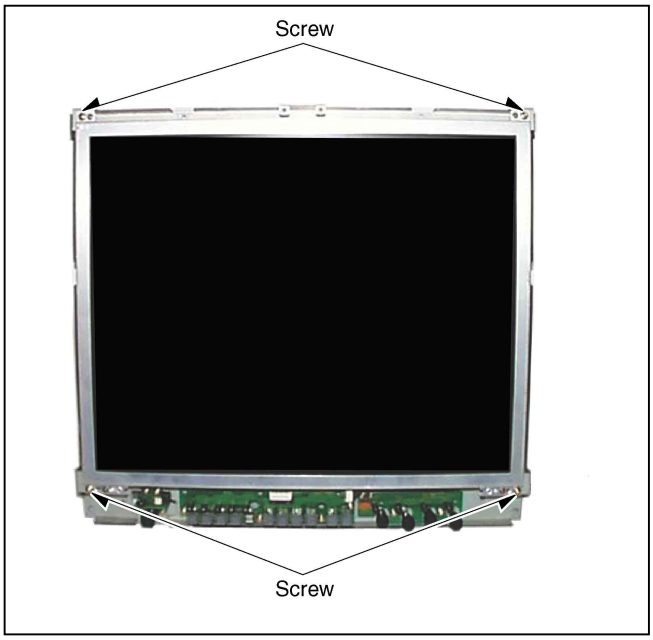
1. Removal of Front Panel

1. Remove 6 screws as shown below and remove the Front Panel.

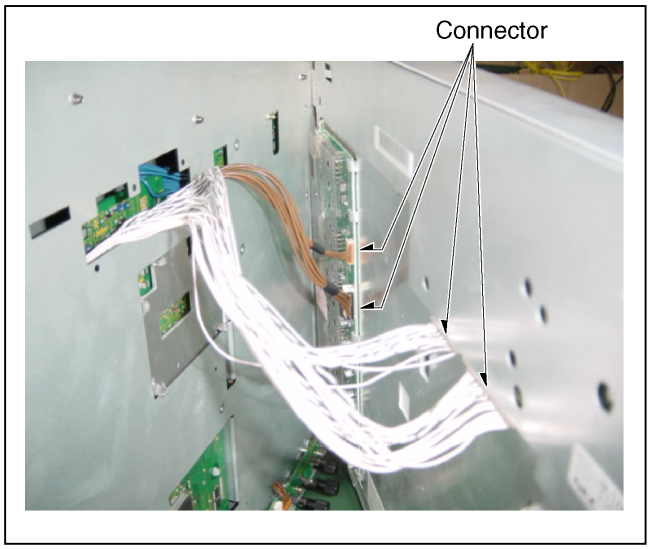


2. Removal of LCD Panel

1. Remove the Front Panel.
2. Remove 4 screws as shown below.

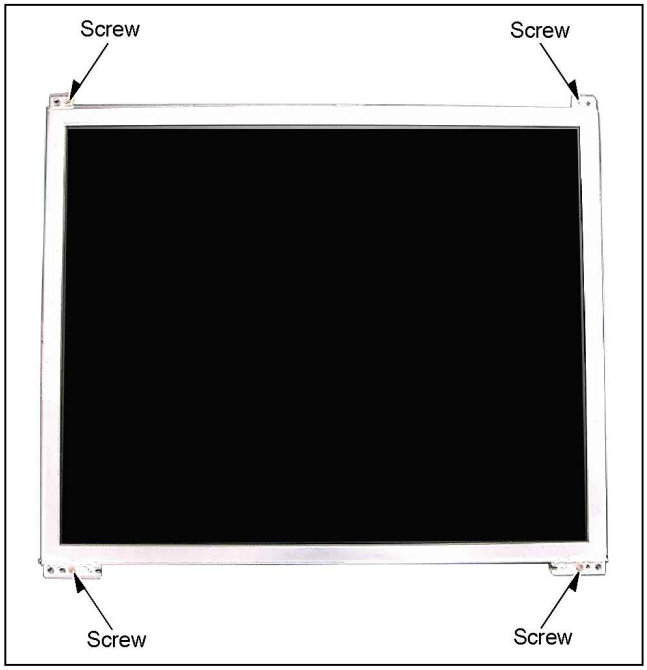


3. Disconnect 4 connectors on the rear of the LCD Panel and remove the LCD Panel.

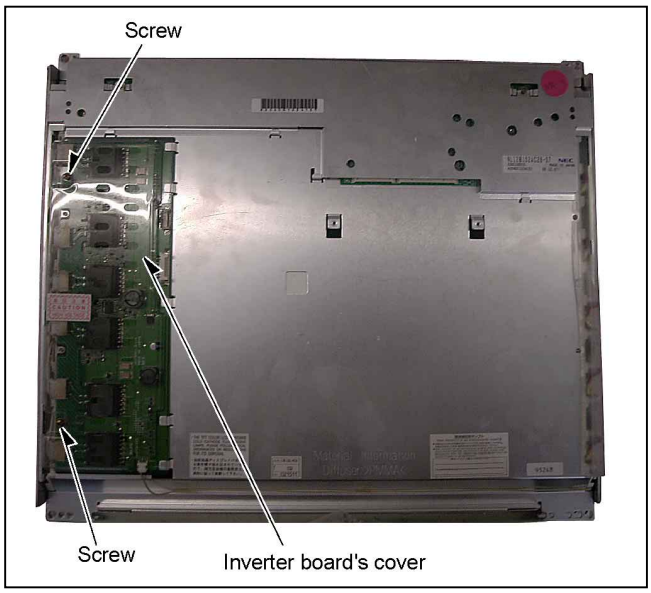


3. Removal of Backlight

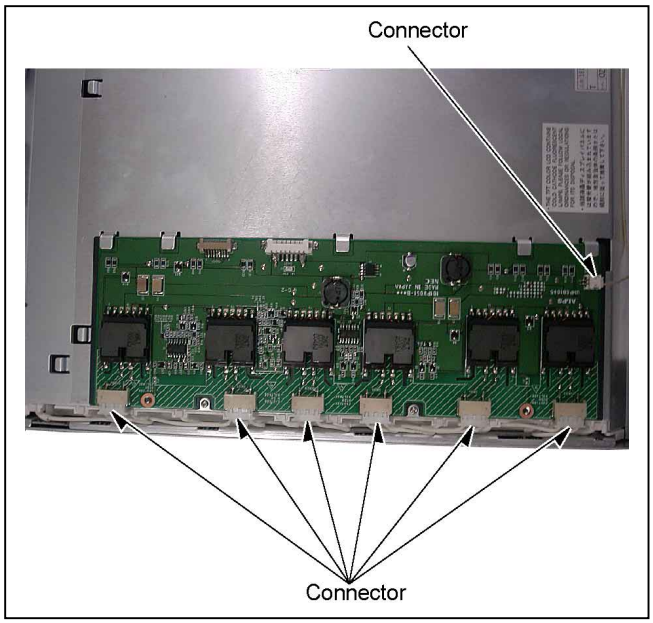
1. Remove the LCD Panel.
2. Remove 4 screws and remove the frame.



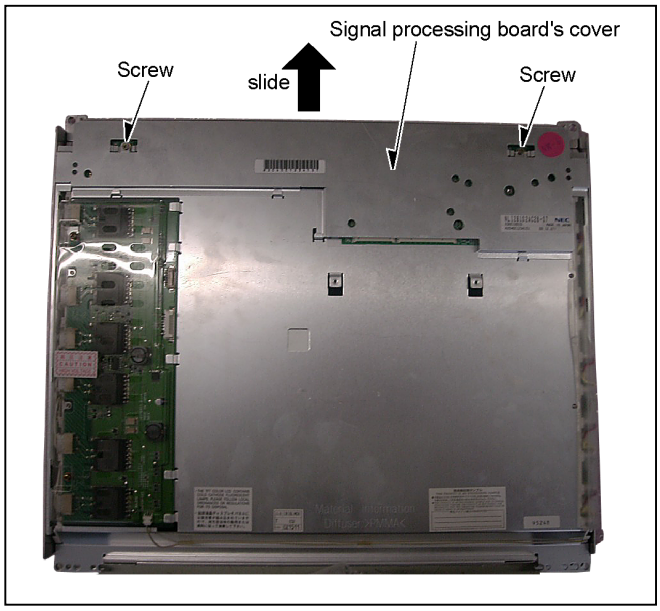
3. Remove 2 screws on the inverter board on the rear of the LCD Panel and remove the inverter board's cover.



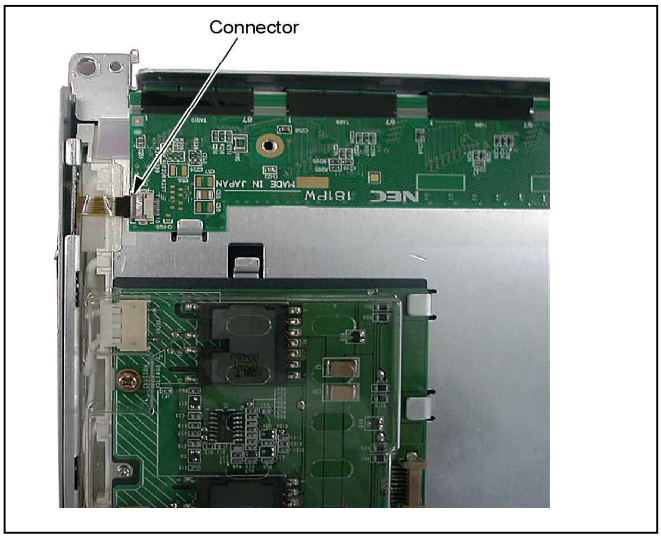
4. Disconnect 7 connectors as shown below and remove the inverter board.

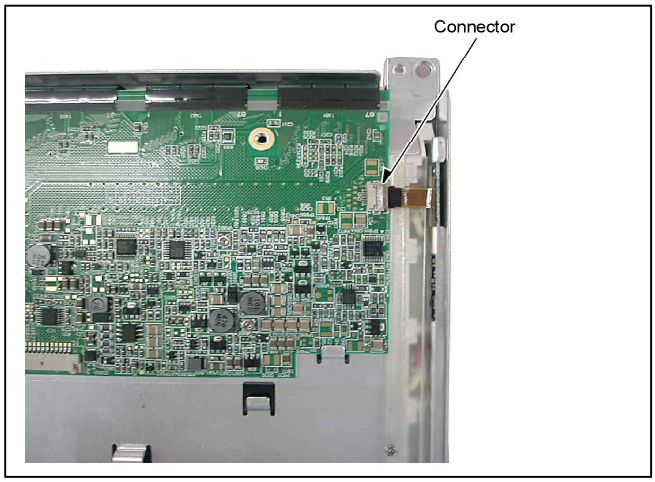


5. Remove 2 screws as shown below and slide the signal processing board's cover in the direction indicated by the arrow to remove it.

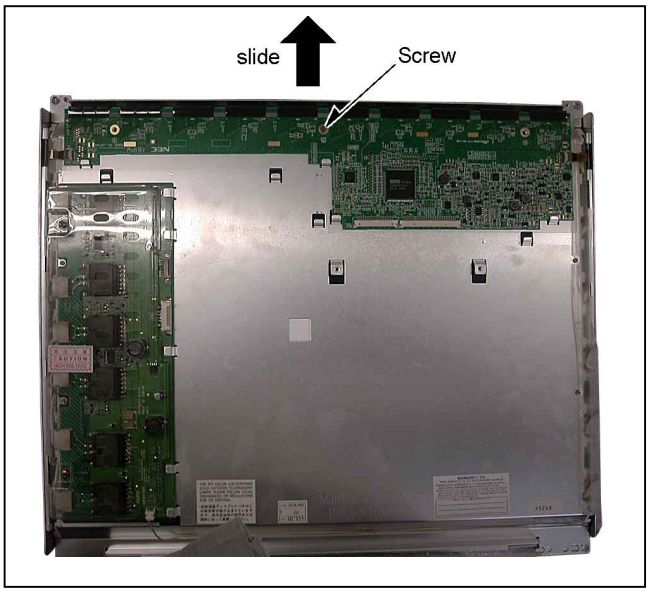


6. Unlock 2 connector's locks and disconnect flexible cables as shown below.
Be careful as this is easily damaged.

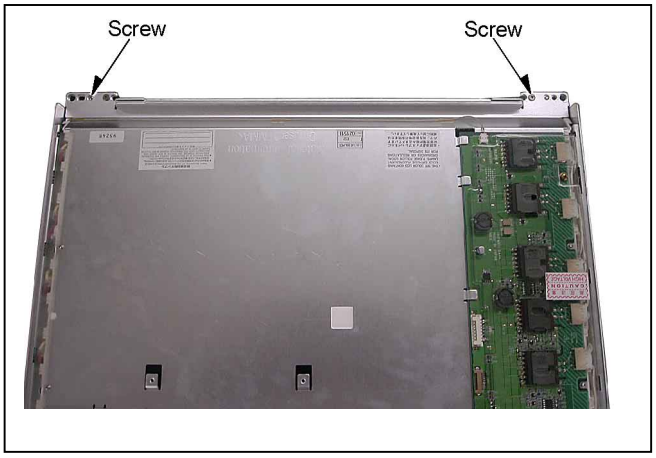




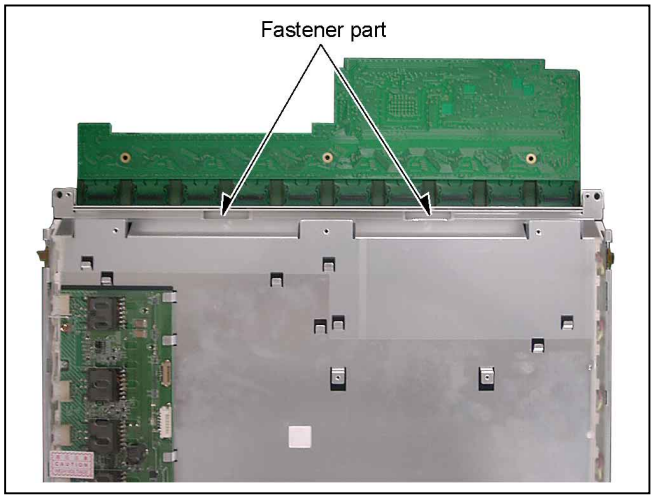
7. Remove a screw as shown below and slide the signal processing board in the direction indicated by the arrow to open it in an upward direction.



8. Remove 2 screws as shown below.

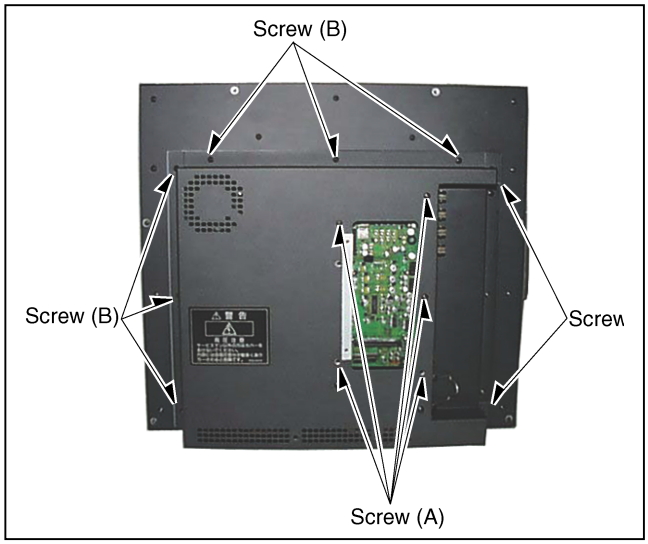


9. Undo 2 fasteners as shown below and take out the Backlight unit.



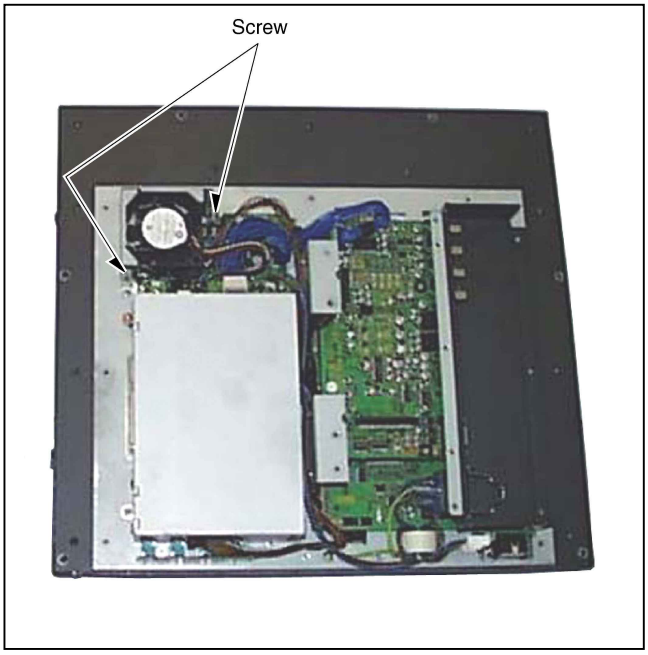
4. Removal of Back Case

1. Remove 5 screws (A) and remove the Option cover.
2. Next, remove 8 screws (B) and remove the Back Case.

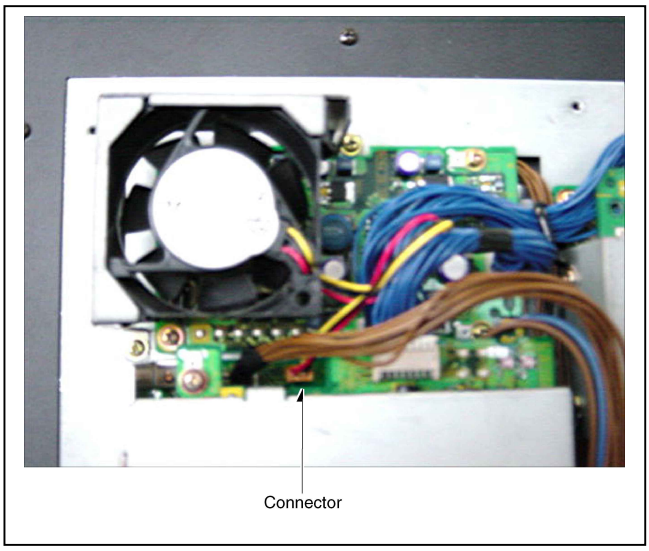


5. Removal of Fan Motor

1. Remove the Back Case.
2. Remove 2 screws as shown below .

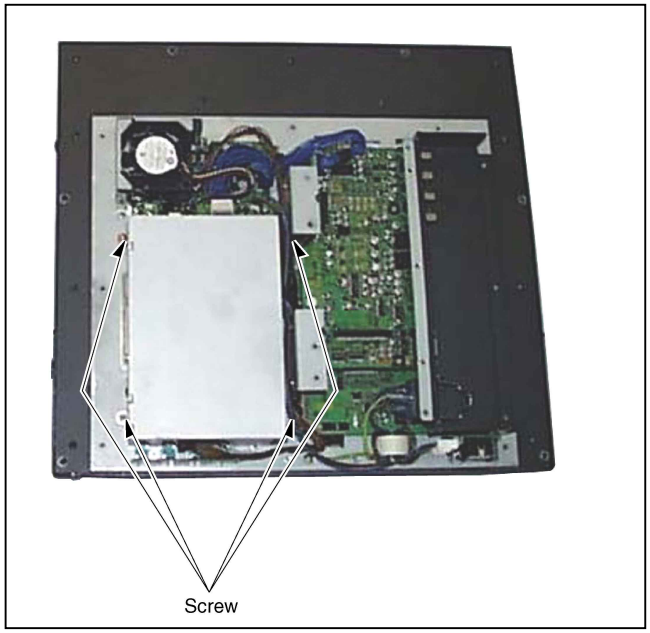


3. Disconnect a connector as shown below and remove the Fan Motor.



6. Removal of Power Unit

1. Remove the Back Case.
2. Remove 4 screws as shown below.



3. Disconnect 4 connectors as shown below and remove the Power Unit.